

The Journal

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOLUME XXV. No. 5
WHOLE NUMBER 285

GRAND RAPIDS, MICH., MAY, 1926

YEARLY SUBSCRIPTION
\$5.00: SINGLE COPY, 50c

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Office of Publication,
Powers Theatre Building,
Grand Rapids, Mich.

Entered as second-class matter March 12, 1913, at Grand Rapids, Mich., under the Act of March 3, 1879. Acceptance for special rate of postage made under Article 1103, October 3, 1917 and authorized August 7, 1918.

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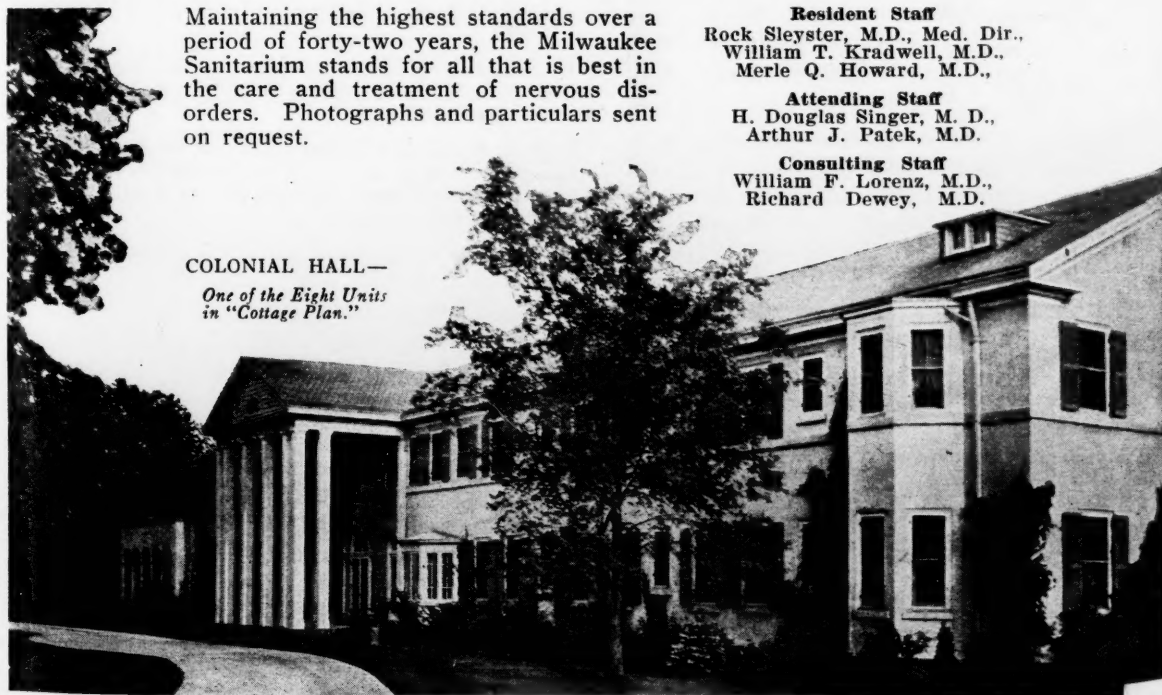
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Original Articles

THE TRANSPORT MECHANISM OF THE ALIMENTARY TRACT AND ITS CLINICAL SIGNIFICANCE

C. F. McCLINTIC, M. D.,

(Professor of Anatomy, Detroit College of Medicine and Surgery, Associate Neurologist, Providence Hospital)

DETROIT, MICHIGAN

Probably none of the basic facts of the Science of Medicine are more confusing than that of the visceral nervous system. A few years ago we studied the pneumogastric nerve and sympathetic nervous system. Then we learned later of a vago-sympathetic, then of a para-sympathetic, and later of the autonomic. So today the text books tell us of the autonomic nervous system and sympathetic.

The reason for this confusion it seems to me, has resulted from the failure of the physiologists, (1) to correlate their physiological knowledge and (2) to take a complete survey of the field, instead of studying it piece meal by doing a little piece of research work at first one place and then another and drawing final conclusions with reference to one part without taking into consideration the inter-relation of other parts.

For example, one will study the submaxillary gland, another the parotid, and third the sublingual and draw different conclusions for each with reference to their nervous mechanisms when as a matter of fact they are identical not only functionally but anatomically as well.

The same is true for the thyroid innervation, the pancreas, liver supra renals, etc.

From the evolutionary viewpoint the visceral nervous system is a survival of the old ganglionic chain systems found in the earth worm, bees and all lower forms and

in them the functions are identical for different segments.

So we should regard our visceral systems as archaic mechanisms which have become enveloped by the so-called somatic or voluntary mechanism which serves to house the old vegetative mechanism, and the old mechanism works in the same old way in its new home as it did in the old one.

So with your permission I will endeavor to present the general plan of structure of the visceral nerve mechanism and point out the uniformity of its reactions.

When the visceral nervous system is analyzed on its motor side it is seen to have two phases. One of which is motor or a contracting phase, the other an inhibitory or a relaxing phase.

A study of the structure of the system reveals this fundamental rule, namely the nerve fibers which cause contraction of visceral or plain, or smooth or involuntary muscle originate within the cerebro-spinal axis and relay in ganglia located in or on the viscus enervated. Those fibers which cause the relaxation or inhibition, originate within the cerebro-spinal axis and relay in ganglia peripheral to or some distance from the viscus enervated.

These statements are true for all of the visceral nervous system whether it be the vagus, or autonomic, or sympathetic, or para-sympathetic. There seems to be an exception in the case of the vagus to the heart but the heart is in a category of its own because its musculature partakes of the nature of both involuntary and voluntary muscle, and there is some good evidence that the vagus nerve is not purely a visceral nerve but is in part somatic. With this exception noted we are prepared to show that the visceral vagus motor is not in any sense different from the sympathetic motor. The confusion has resulted from morphological changes incident to the development of or the superposition of the voluntary nervous system on the old archaic visceral mechanism.

So let us point out the identity between the vagus and sympathetic or autonomic.

*Read before the Clinical Section of the Congress on Internal Medicine at Detroit, Michigan, Feb. 22-27, 1926.

Located in the brain stem and spinal cord is a column of gray substance the cells of which form the centers for the endings and origin of the visceral nerve fibres. In the medulla of the brain-stem these cells constitute the vagal, salivatory, and other nuclei. In the spinal cord they constitute the nuclei of Stilling, and Clarke's column. (Fig. I).

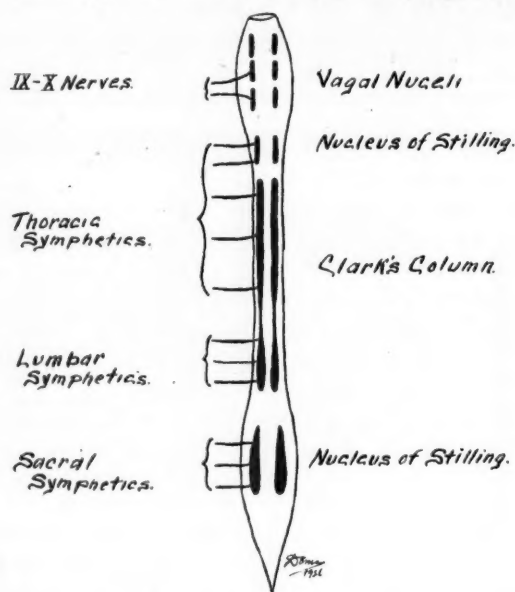


Figure I

The sensory or afferent fibers to these centers are identical in extent with the somatic sensory neurones. That is, the sensory visceral fiber arises in the viscus, runs to the sensory nucleus and continues into the central nervous system. (Fig. 11).

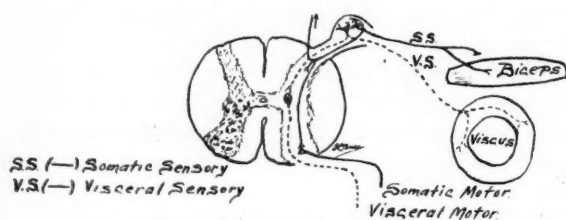
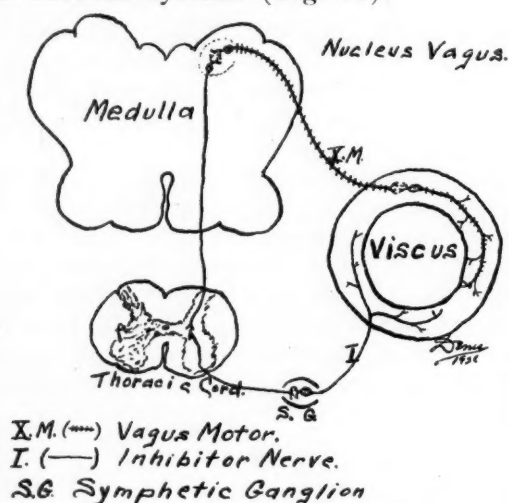
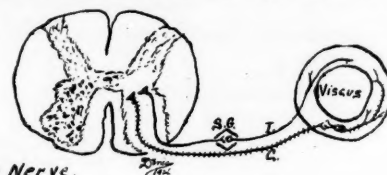


Figure II

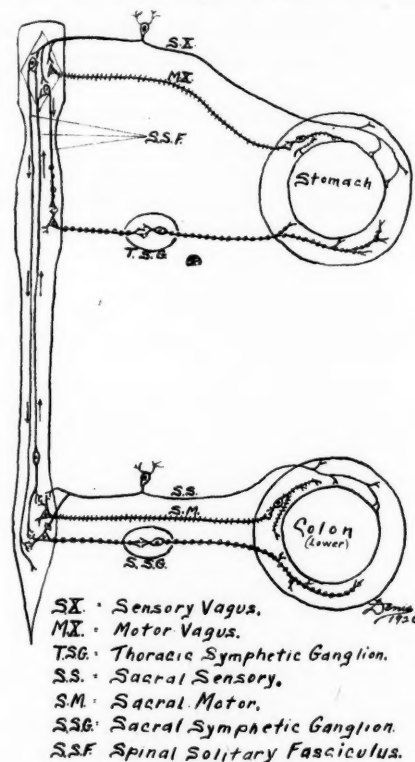
The outgoing motor fibers arise from the central cell body and if it is motor, i. e. causes contraction of visceral musculature it runs to the viscus and relays in the intrinsic ganglia; if it is inhibitor, i. e. causes relaxation of visceral musculature, it relays in a peripheral ganglion some distance from the viscus to which it is destined. (Fig. 111).



I. (—) Inhibitor Nerve.
C. (---) Contraction Nerve.
S.G. Sympathetic Ganglion.

Figure III

The upper part of the alimentary tract is supplied by the vagus and autonomic nerves. The lower part by the sympathetic, but as seen from our previous statements, these not only function in identical manner but are also identical in structure. The differences being apparent rather than real. By reference to the chart (Fig. IV), it is noted that



SI - Sensory Vagus.
MI - Motor Vagus.
TSG - Thoracic Sympathetic Ganglion.
SS - Sacral Sensory.
SM - Sacral Motor.
SSG - Sacral Sympathetic Ganglion.
SSF - Spinal Solitary Fasciculus.

Figure IV

that motor fibers of the vagus come out of the medulla and relay in the plexus of Auerbach and Miessner in the viscus. The inhibitory fibers come out of the thoracic cord, relay in the sympathetic ganglia and then terminate in the viscus.

In the sacral sympathetic it is noted that the motor fiber comes out of the cord and relays in the plexus of Auerbach and Miessner.

The inhibitory fibers come out of the cord and relays in the peripheral ganglion and then terminate in the viscus. Are not these courses identical for the vago-sympathetic, and the sacral sympathetic?

But you may say that their central connections differ. Let's analyze it. A bundle of associations fibres called the solitary and spinal solitary fasciculus is present in the medulla and cord which connects the vagal center of the medulla and the sympathetic in the cord as represented in the chart (Fig. V).

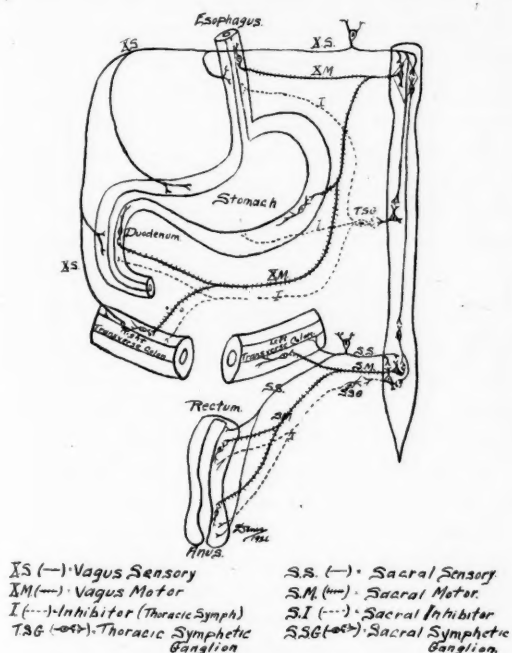


Figure V.

In the Lumbo-sacral region similar intra-spinal fibers exist which, while shorter, connect the motor and inhibitory cells of the sacral sympathetic (Fig. V and VI). This

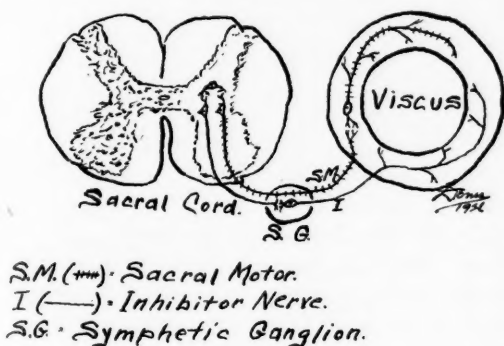


Figure VI.

demonstrates quite clearly, therefore, that the mechanisms to the upper and lower portions of the alimentary tract are identical in structure as well as in function.

The mechanism above described is the same whether we are discussing the blood vessels (vaso-constriction and vaso-dilata-

tion) the glands, the lungs, the bladder, the uterus or the alimentary tract.

So let us confine our attention to the neuro-muscular mechanism of the alimentary tract. In the consideration of the digestive tract we should not lose sight of the fact that one of the physiological properties of visceral muscle is that of automatic and rhythmic contractility, and this may occur independently of the nerve supply but in a system of such great length as the alimentary tract it is quite essential that the contraction wave pass in a given direction, that it be properly correlated, and in the second place because of differences in function of different segments of the digestive tract it is quite essential that the automaticity of the gut wall be properly regulated to subserve the function of the particular segment of the gut. For example, it has been observed that the rate of passage of the gut content is about as follows: It takes food about 8 seconds to travel the esophagus; some food passes from the stomach to the duodenum a few minutes after entrance; in 4½ hours it begins to enter the cecum; in 6½ hours it has reached the hepatic flexure; in 9 hours the splenic flexure; in 30 hours it is in the iliac and pelvic colons. These are the observations of Dr. A. F. Hurst on a bismuth meal observed with a fluoroscope. If the rate of its passage through the esophagus were maintained throughout it would leave the rectum in about 4½ minutes. So that while the visceral musculature of the gut can contract automatically and rhythmically yet it must be correlated in order to permit the digestion and absorption of food.

The gut when completely severed from the central nervous system is similar to the alimentary tract of an earthworm whose food, moist earth, passes through in a continuous rhythmic stream. In certain pathological conditions this condition may result as in certain forms of ileus in which food passes rapidly through the bowel in an undigested state.

To bring about the correlation of the various segments with their different functions, we find nerve centers located along the gut, and associated with these centers are more or less well developed sphincters which when they close confine the contents of the gut to a certain segment.

The nerve centers were worked out by Keith, and are associated with his name as the nodes of Keith.

By reference to the chart (Fig. VII—from Traves—) you will note that they are located at the (1) upper and (2) lower ends of the esophagus, (3) at the junction of the duodenum and stomach—the pylorus, (4)

one just below the entrance of the bile duct, (5) at the ileo-cecal junction, (6) right middle third of transverse colon, (7) at junction of rectum and the sigmoid colon and (8) at the external anal sphincter.

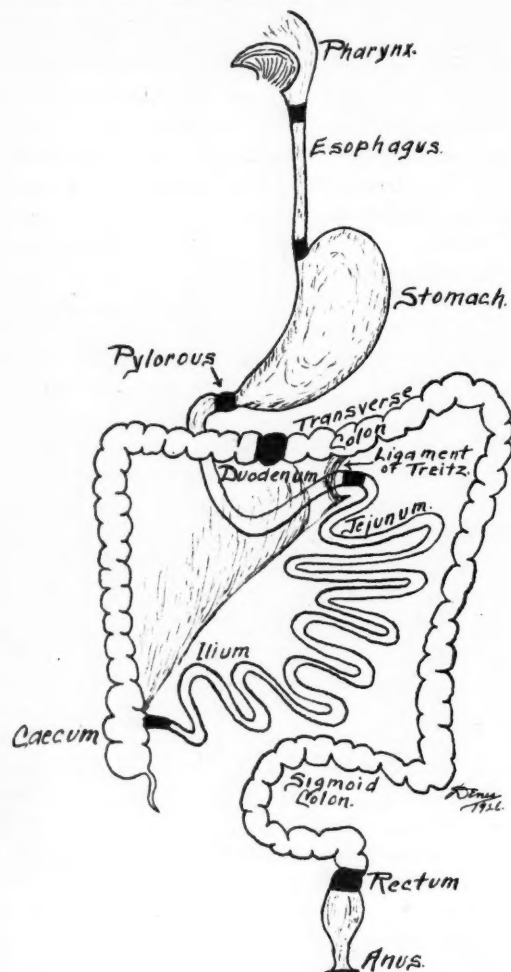


Figure VII.

These nodes are similar to the circles of irritation found in the bronchi—there they are located at the branching of the bronchi and the wave passes towards the larynx. In the alimentary tract, in certain segments the waves are directed towards the anus, in others at one time towards the anus and at other times toward the mouth.

In the esophagus, small intestine, left two-thirds of the transverse colon, and the descending colon the peristaltic wave passes towards the anus. In the stomach, ascending colon, and right third of the transverse colon they may pass either way.

The irritability of the gut is greatest at these nodes and gradually decreases until the next one is reached. To all that portion where normal reverse peristalsis occurs, the vagus nerve is distributed. Under certain pathological conditions reverse peristalsis may occur in the part distal to the distribution of the vagus.

It is from these nodes that the normal movements of the gut are regulated but in the event of a pathological condition resulting in a disturbance of their normal functioning one of three or four things may happen. A spasm at one of the sphincters may occur, producing stasis of the intestinal contents, constipation, etc., a reverse peristalsis may result, or a combination of spasm and reverse peristalsis as in vomiting with pylorospasm, or relaxation and immobility may occur as in gas distension from failure of the motor impulse to be transmitted and finally a spastic condition may result from failure of the inhibitory impulse to pass.

On this basis we have therefore an explanation for regurgitation, vomiting, spasm of the pylorus, duodenal spasm in which bile enters the stomach and is vomited, stercoral or fecal vomiting as in appendicitis, tympanites, spastic and atonic constipation.

I might mention in passing that the node in the duodenum is often the cause of more mischief than we suspect. It is possible for a spasm of it associated with a spasm of the pylorus to dam back the bile and produce jaundice, and also involve the pancreas.

With a knowledge of the nerve mechanism a basis is found for the palliative treatment of these conditions. Since the vagus nerve is motor to the upper part of the gut as far down as the junction of the right and middle thirds of the transverse colon, a spasm can be relieved by a drug which will depress or paralyze the vagal nerve endings or which will stimulate the inhibitory mechanism.

In atropine we have a drug which will depress the vagus. In adrenalin and hydrochinone we have a drug which will stimulate the inhibitory mechanism. Physostigmin will act to stimulate the vagus. Pituitrin and Ergot act to stimulate the muscle. Strychnine will also tone up the reflexes. So that strychnine, pituitrin and physostigmin are suggested in atonic conditions and adrenalin, atropine, and hydrochinone in spastic conditions.

That a therapeutics founded upon this basis is rational has been confirmed by my own experience in my general practice and in my Medical Service in Eloise Hospital. C. E. Haines of New York State concluding a paper states that tincture of belladonnae permanently relieved epigastric distress which as revealed by the roentgen ray was due to a contracture of the pyloric quarter of the stomach and concludes that no exploratory incision should be made on the basis of a deformed stomach as shown by the X-ray until the patient has been brought under the influence of belladonnae.

F. Hamburger of Munich emphasized the efficacy of the subcutaneous injections of .1 mg. of atropin in pylorospasm of infants.

A New York physician in an article, the journal in which it occurred I am unable to locate, recites a long series of cases of jaundice and gall stone colic which ordinarily would have been operated upon as clearing up on the administration of belladonnae, and Cohen of Vienna recommends it for spastic constipation.

SUMMARY

We have endeavored to show: (1) That at definite locations along the gastro-intestinal tract there are nerve centers (Nodes of Kieth) from which the impulses regulating gastro-intestinal movements take origin. (2) That due to disturbances of these nodes abnormal motor activity may result such as vomiting, intestinal stasis, spasm, spastic constipation, atonic constipation, etc. (3) A knowledge of the neuro-muscular mechanism involved in motor disturbances of the alimentary tract forms a rational basis for the therapeutic treatment of the condition, e. g. to relax a spasm by local action on the musculature magnesium sulphate may be used; to relax the spasm by acting on the intrinsic ganglia atropine may be used; or by action on the sympathetic ganglia adrenalin may be used. To tone up the neuro-muscular mechanism in atonic states pituitrin and physostigmin may be used for local action and strychnine for its stimulating effect on the spinal cord mechanism. The application of the above principles has proven successful in practice.

THE NEWER THINGS IN DENTISTRY

WALTER G. KINYON, D.D.S.
TRAVERSE CITY, MICHIGAN

In trying to pick out the newer things in dentistry I find I am up against a rather tall order. The Profession of Oral Surgery, being as you well know, such a divided one; on one hand we have the purely pathological and physiological conditions of the oral cavity to restore to a more or less normal condition, and on the other hand we have the purely mechanical restoration to normal of the masticating function of the jaws and teeth. To do this subject justice, it seems to me, to be quite necessary to divide my subject in the same manner in which the practice of the profession itself is divided. First:— the purely pathological restoration of the teeth, bone and tissues of the mouth

to a normal condition and Second:— The purely mechanical restoration of the masticating function of the mouth by mechanical appliances.

It is a bit difficult to determine just what is the newest thing in ideas and methods in the first named division. I might say that the use of nitrous oxygen gas with oxygen, or the use of ethylene gas is one of the newer methods of anesthesia, again, one might speak of the newer technic used in nerve blocking, all good and all more or less new. But it occurs to me that the biggest advance in diagnostic work and the greatest aid in the newer idea of preventative dentistry is the newer conception of the use and help derived from the intelligent use and correct interpretation of dental radiograms. So I will confine myself, in the first named division of my subject, to the "Use and Abuse of the Dental X-Ray."

There was a time, not so long ago, that the dental radiogram was considered the final word in diagnostic work. If your radiogram showed a dark area, of any kind or description, anywhere near the apex of a suspected tooth, that tooth was doomed; the radiogram showed a dark area and that was the final word.

Fortunately methods have changed, this hit or miss guess work without any understanding of the anatomical, physiological and the pathological structure as shown in the radiogram of normal bone and tissue, has been superceded by a close study and a better knowledge of the histology, anatomy, physiology and pathology of the normal bone and normal tissues of the area under examination. So that when one interprets the radiogram of today he is in a position to state quite definitely any pathological change from the normal appearance and to make a correct diagnosis, as well as prognosis of the tooth or teeth in question. I don't claim that a diagnosis based purely on the findings as revealed in the radiogram is the final word, but I do claim by the aid of the radiogram and its intelligent reading, together with the subjective and objective, the systemic and local clinical findings one can make a very accurate diagnosis of the tooth in question.

I think that the story of the two old codgers who could not tell the time of day by looking at the clock, neither of whom wished to admit it, will better illustrate what I mean by a hit or miss diagnosis. Seems neither could tell time by a clock, but always depended on the sun. One of them became the proud possessor of an Ingersoll and meeting his friend and being asked the time, proudly holds the timepiece so his

*Read before the Grand Traverse-Leelanau Medical Society, February 9, 1926.

REFERENCES:—Browning's Dental Radiogram, "Oral Hygiene".

friend could see, saying 'there she be'. His friend, after careful scrutiny and not wanting to show his ignorance replies, 'damned if she ain't'. It is quite similar to a case in mind of a radiogram of a second inferior bicuspid, this radiogram showed a beautiful circular shadow just at the apex of the root of the tooth. The dentist proudly held this up to the light so that his patient could see and pointing to the dark shadow says, 'there's your trouble, a mighty bad apical abscess we must extract at once. The patient as ignorant as the dentist, agrees and the tooth is extracted. Then both are fearfully surprised to find no indication of an apical abscess, and in fact on further examination the tooth proves to have a vital pulp. If the dentist had known his regional anatomy a wee bit better and if he had made the few simple clinical tests, then studied his radiogram and tried to ferret out any pathological changes that might have been present, he would have found that what he took for an apical abscess was nothing more or less than the shadow of the mental foramen or termination of the mandibular canal and his patient would have one more tooth to help masticate his food.

Another case comes to mind of a patient sent in to me by a physician for examination. Patient presented all the symptoms of a badly ulcerated tooth; swelling, fever, pus exuding quite freely, yet in this self evident case a radiogram was taken, fee collected and the patient sent to me for extraction. In this case no attention at all was paid to a clinical examination, the only excuse for the radiogram was the fee.

How can one say positively, with only the X-ray findings to go by that a certain tooth has an apical abscess, due to infection when two other causes of that pathological condition have not been taken into consideration. Might that condition be brought about by extensive instrumentation? Might it not be brought about by extensive medication? Most surely, but if all clinical findings also point to infection and not to mechanical or chemical causes, then and then only are we justified in our having our patient part with an important member of his masticating family. I am a bit insistent on this point because we are quite prone to take the X-ray findings as final. Especially so when we ourselves do not make the radiograms but depend on others, not only to radiograph, but to interpret the radiograms for us. We somehow forget that the X-ray findings is only one phase of the diagnosis and we must complete these findings by clinical diagnosis ourselves before we get a true history of the existing conditions.

Again it is quite impossible to diagnose pyorrhea alveolaris in a dental radiogram; but in the condition known clinically as pyorrhea alveolaris radiograms will show much or little alveolar resorption according to the extent of the disease. Here again we come face to face with the absolute folly of taking the X-ray findings as the last word, it is not and was never intended to be; it is simply an aid and not a cure all.

By the proper use of the X-ray machine, and of special interest to you physicians is the ferreting out of pains of the face and head which are of obscure origin. We find by radiograms that these pains are caused many times by impacted teeth, unerupted or malposed teeth, broken fragments of bone, injury by careless extraction, foreign bodies, etc. Here again the full worth of the radiogram is self evident.

To the practitioner of orthodontia, it gives him a complete history of the case in hand; by it he knows the position of every tooth in the jaw; how far the permanent tooth is taking the place of the primary dentition; what teeth are malformed, what ones malposed. In fact, he has the jaw before him, as easy to read as the printed page.

For the exodontist, it gives the position of broken off fragments, the roots that would be next to impossible to extract if he did not know before hand their exact position. I know in my own case I absolutely could not keep house without my X-ray machine.

To the general practitioner, it gives the extent of tooth decay, how much stress the enamel and dentine will stand. It shows up hidden areas of decalcification long before they are palpable with an explorer. It shows him his mistakes in crowns and fillings with overhanging margins, etc. By it he has a very accurate prognosis of the life of a tooth he wants for an abutment.

For the dental canal worker; he will know without any guess work how perfect his canal fillings are, how closely he has been able to hermetically seal the apical end of his canals. He will know long before the patient the beginning of any pathological disturbance in the peridental membrane, in the alveolar cortical line, in the bone and tissues adjacent.

For the hygienist, it will show the hidden areas of calculus, how rapidly the resorption of the alveolus is getting back to normal. No, gentlemen, I cannot think of one single thing in dentistry that is of such wonderful help in all branches of the profession as an X-ray machine coupled with the knowledge of anatomy, physiology, histology and pathology so that one can intelligently interpret what the radiogram shows.

"In view of the fact that so many systemic disturbances have as their etiological factor focal infection in the oral cavity, it becomes the duty of every physician to acquire the accomplishment of correctly interpreting dental radiograms in order to intelligently co-operate with the dentist in the diagnosis and treatment of certain cases."

You will perhaps think this long discourse on the use and misuse of the X-ray in dentistry is the mutterings of a diseased mind, or else that it is simply a text book review. Gentlemen, it is neither. The cases I have cited are from my own practice, for many years I have been dependent on others to do my radiographic work and it is from these X-ray findings that I have learned the absolute folly of depending on a correct diagnosis from X-ray findings independent from clinical findings no matter how skilled the man was in interpretation. One must have both the X-ray and the clinical findings before he can give an intelligent and correct diagnosis.

So much for the first part of my assigned subject. Second the newer mechanical appliances.

Ever since Dr. Mayo made that famous speech that the next big advance in medicine would be through the dentist and that all dead or pulpless teeth must go, the dental profession has been in a turmoil. Right after that speech the 100 per cent club was formed by Dr. Dodge. "Remove all dead and pulpless teeth," was their slogan and the slaughter began. Physicians prescribed the extraction of all teeth for a general cure all, from falling out of the hair to brain diseases. However the pendulum is swinging back the other way, and the former 100 percenters are beginning to save a few of the teeth they formerly extracted.

Just how much of a menace the pulpless tooth is to the general health of the individual, I am hardly in a position to say. But I will say that unless one is willing to give the time to careful and mighty thorough canal work, checking up his results from time to time with radiograms, and the patient is willing to pay the fee such work demands and to give the time absolutely essential for this class of work, then the best results for both the dentist and the patient is the extraction of the diseased tooth and its place filled with one of the many clean, sanitary, hygienic porcelain or cast gold self cleaning or removable bits of artificial dentures.

But I will say that if this seemingly useless slaughter of countless pulpless teeth is of no other value it has developed the purely mechanical phase of dentistry to the Nth

degree. Never before in the history of mechanical dentistry has there been such wonderful new developments, not only of appliances to take the place of the number of teeth lost, but of materials used in their construction. Perhaps none of these artificial substitutes are as popular as the new cast gold appliances, in the perfection, both in material and technic, these seem to be the leaders. Light, cleanable by removing, esthetic and useful. The old fixed bridge, with its cesspool of filth, is a thing of the past. Porcelain, with its highly glazed surface is tolerated by even recently bruised tissue, is also being used where indicated. The use of these removable appliances has become so common that some day one will see in the paper a similar notice of one I saw in an Indiana paper:—

"Crawfordsville, Ind., June 9, 1925.

"An order has been issued by Chief of Police Shields, forbidding owners of false teeth from washing them in the public drinking fountains of Crawfordsville."

EAR COMPLICATIONS IN SOME OF THE MORE COMMON ACUTE INFECTIOUS DISEASES

B. F. GLOWACKI, M. D.
DETROIT, MICHIGAN

The incidence, course, terminations of ear infections arising in the course of an infectious disease often present a difference in many respects from those of the idiopathic forms. The deleterious effects of certain general diseases upon one section of the ear or another are productive of lesions requiring widely different prognoses. The peculiarities of ear inflammations caused by acute infections are therefore discussed under separate headings.

INFLUENZA

The frequency of ear complications in influenza varies in different epidemics; the number of cases necessitating operation, too, are in direct proportion to the severity of the ear infections. Bullous swellings filled with sanguineous serum may arise on the drum membrane. Spontaneous rupture usually follows, but shortly a similar exudate fills the middle ear cavity. The onset of the otitis media is sudden and the course fulminant chiefly due to the existing upper respiratory inflammation and nasal sinus empyemas. The severe pain and fever seem entirely out of proportion to the ear picture. If the mastoid becomes involved, it rarely subsides spontaneously. Most ear suppur-

ations in children date from an influenza: Kerley (1905) found 75 per cent of them were caused by influenza.

Internal ear. Labyrinthin involvement occurs, but not as frequently as in scarlatina, typhoid, measles and diphtheria. The tendency to hemorrhages and the high toxicity occasionally attack the labyrinth or eighth nerve without a middle ear suppuration being present. The prognosis in such instances is particularly unfavorable. A neuritis, again, may involve in order several cranial nerves, this disturbance, however, shows a tendency to recede with the exception of a permanent involvement of one of the nerves.

The diagnosis is easily established where the general symptoms of influenza are dominant and the ear discharge is from the onset bloodtinged. Mild cases of influenza, however, may be overshadowed by the more prominent ear symptoms. Early paracentesis is the best step toward a favorable subsidence of the ear complications.

MEASLES

An infection of the external ear is a rare occurrence, although noma or an extensive desquamative process may be encountered. The middle ear, on the other hand, is perhaps involved more frequently than in any other infectious disease. The usual pathway of infection is through the eustachian tube. The primary or specific form is in reality an enanthema of the tympanic mucosa; less frequently a late infection results from the catarrhal condition of the nose and throat coupled with the poor general resistance of the patient. The inflammation is usually confined to a catarrhal or suppurative process of the middle ear. When mastoid invasion results, the destruction is rapid and justifies early operative intervention.

Complications of the internal ear are not frequent and ordinarily do not induce total deafness. Certain epidemics, however, have been known to be particularly destructive to the labyrinth and to have produced frequent intracranial complications.

TYPHOID FEVER

The incidence of ear complications in typhoid fever is low. During the war, however, statistics have demonstrated a large number of middle ear suppurations; the post-bellar curve, nevertheless, has made a sharp decline.

The onset, occurring usually about the fourth or fifth week, gives rise only to moderate local symptoms. Extensive destruction sometimes takes place but the prognosis is favorable. The typhoid bacillus in the dis-

charge is very illusive and can be found only intermittently. It is usually in pure culture. Urbantschitsch reports 27 mastoidectomies in typhoid patients with the following bacteriological findings: streptococcus and staphylococcus in 19 cases, diplococcus in one, and typhoid in two cases.

Zeidler having made systematic observations in 240 typhoid patients, records three cases of external ear and 17 of middle ear involvement (7 per cent). Two patients developed a diffuse perichondritis and the third had an abscess in the auditory canal a culture from which disclosed typhoid bacilli. He observed that the middle ear suppuration manifests itself about the fourth week, when the fever and general lymphatic hyperplasia are greatest. An otitis, too, seemed to prolong the typhoid fever. In patients who had a chronic suppuration, a fresh infection resulted promptly at the onset of the fever and usually led to nearly total deafness.

The internal ear is usually spared; sometimes isolated cochlear involvement occurs due to localized lymphatic infiltrations.

PERTUSSIS

Ear complications in whooping cough are rare. Rupture of the drum due to violent coughing has been reported. Denker and other authors have observed deafmutism following pertussis.

MUMPS

Affections of the auricle, external canal and middle ear are not frequent, while the internal ear becomes seriously involved. A specific, toxic labyrinthitis (Linck, Politzer) is very destructive. It is usually of sudden onset with tinnitus, progressive deafness ensuing perhaps even without vertigo. The deafness is usually permanent, often bilateral, but the one ear affected less seriously. The pathology has been described as a neuro-labyrinthitis and localized meningitis.

SMALL POX

Only in the serious cases when the constitutional symptoms are severe is otitis media encountered, and in these instances it is only mild in character.

SCARLET FEVER

The severest complications appear in the course of scarlatina. Bilateral otitis and unusually rapid progressing cases are seen in scarlatinal-diphtheria. About one-fifth of the ear cases in scarlet fever result in a chronic otorrhea.

Ear infection ensues by one of three modes: (1) by direct continuity from the throat, (2) through the eustachian tube

without involvement of the latter, (3) through the circulation, entirely hypothetical but proposed by Politzer. About 10 per cent of scarlatinal patients suffer with some ear disturbance; 7 per cent come to operation and one-half of this number disclose intracranial complications.

The onset of the ear trouble is not characterized by much pain, hence spontaneous perforation is the rule. This feature predisposes to extensive destruction and a subsequent protracted course.

Labyrinthitis (serous) is of toxic origin; a diffuse purulent labyrinthitis, subsequent to a middle ear suppuration, particularly when the latter is scarlatinal-diphtheritic, produces total destruction of the labyrinth and is the foundation in the young child for deafmutism.

The prognosis in the simple forms of scarlatinal otitis is favorable except in very young children and in anemic patients showing marked lymphatic tendencies. Fatal cases of scarlatinal-diphtheria as a rule have all had a middle ear suppuration.

DIPHThERIA

External and internal ear infections are rare. Specific otitis media is not encountered very often (Korner, Politzer, Denker). A non-inflammatory otitis media accompanies practically every pharyngeal diphtheria, but does not necessarily lead to suppuration. Usually as soon as the nose and throat symptoms have passed their acme (and the antitoxin having been given) a second rise in temperature with pain in the ear initiates the middle ear suppuration.

When the Klebs-Loeffler Bacillus is the instigating organism, it may persist in the secretion for two to six months, even longer. Neither intravenous injections nor local instillations of antitoxin into the ear, sterilize the middle ear. It must be stressed that the mere presence of diphtheria bacilli is not so important as a determination of the organism's virulence. There seems to be no need in isolating a non-virulent "carrier". Sterilization of this type of "carrier" can easily be accomplished by ultraviolet ray irradiation.

In a persistent catarrh or otorrhea following diphtheria observe whether the patient has a soft palate paralysis.

ERYSIPELAS

In a discharging ear erysipelas may develop and involve the canal and auricle. A localized erysipelas behind the auricle may stimulate a mastoiditis. Oskar Beck reviews a case of acute otitis media with a spontaneous nystagmus. Labyrinthin involvement was suspected, but the nystag-

mus disappeared just as the erysipelatous infiltration manifested itself in the external canal.

RHEUMATIC FEVER

Some remarks are in order here to clarify a situation that may be confusing because of an association of an otitis media and rheumatic symptoms. (1) Joint symptoms occurring in a patient with an acute ear suppuration must not lead the observer to conclude a concomitant otitis and rheumatic fever. Most likely, some acute infection (scarlet fever) is responsible for both. (2) A diphtheritic patient with a suppurating ear after receiving antitoxin may complain of joint symptoms. Here the anamnesis clearly excludes an articular rheumatism. (3) One would be inclined to associate otorrhea and rheumatism in a patient with sinus thrombosis having high fever and articular symptoms. The intermittent fever and chills alone can easily differentiate the pyemia from an acute rheumatic fever.

A suppurative, rheumatic otitis media is not recognized as a distinct disease, some authors purport a rheumatic etiology in an acute otitis media where the pain still persists after the paracentesis, attributing it to an arthritic involvement of the ear ossicles.

EPIDEMIC CEREBROSPINAL MENINGITIS

The internal ear infection forms the most frequent cause of acquired deafness. Bezold recounts 233 cases of total deafness (acquired), of which 74 followed meningitis. A middle ear suppuration is seldom observed; it may be identified by the organism.

The incidence of ear complications in those patients who survive is not great, though a marked variance has been observed in the figures of different epidemics.

Through the porus acusticus internus the infection travels along the nerve sheathes and blood vessels into the labyrinth. Rapid extension follows through perilymph and endolymph. In four to five weeks the membranous labyrinth is filled with granulations and by the third month ossification has already ensued. Cochlear and vestibular functions may be both destroyed or unequally involved. One labyrinth may be absolutely dead, while the other possesses no hearing but an irritable vestibular apparatus.

The internal ear complication is not often recognized at its onset because the general symptoms of the patient (unconsciousness, severe headache) mask the vertigo and progressive deafness. The prognosis is, of course, most unfavorable recalling the rapid destruction and ossification in the labyrinth. The disturbance in equilibrium is overcome in a few months, remaining perhaps a little longer in children.

THE FREQUENCY OF ENCEPHALITIS LETHARGICA IN MICHIGAN

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A study of the early literature of the epidemic of encephalitis lethargica that swept over continental Europe, the Near East and Great Britain in 1916 and 1917, shows that the disease was quite a new entity in nosology, and for some time clinicians were frankly puzzled by its heterogenous aspects. The epidemic reached our shores in 1918, and fortunately its true nature, both clinical and pathological, had been fairly well established by this time. We, in this country, were, therefore, the immediate benefactors of the pioneering experience of our European colleagues insofar as they had been able to evolve the essential diagnostic symptoms and signs and methods of treatment.

Encephalitis lethargica was made a reportable disease in Michigan in 1921. Table I shows the number of cases and deaths reported for the years indicated.

TABLE I.

Year	Cases	Deaths
1923	65	54
1924	45	51
1925	78	60
Total	188	165

It is obvious from this table that the rule of the State Board of Health, that all cases should be reported, has not been obeyed. In 1924, for example, more deaths occurred from the disease than there were cases reported. The mortality rate for the disease is difficult to determine because of the lack of accurate statistics. Many cases are so mild that the condition is completely overlooked—yet these mild cases may have the same serious sequelae as the severe ones.

Encephalitis lethargica has a large number of sequelae or post-encephalitic states. These sequelae have lately come to be more properly regarded as a chronic phase of the disease. One of the more frequent of these, usually classed second in frequency of occurrence, is known as the Parkinson syndrome. It is so designated because of the close simulation to Parkinson's disease, or "shaking palsy." The following table shows the number of cases of the Parkinson syndrome following encephalitis that have been seen in this clinic each year since 1921:

TABLE II

Year	No. of Cases
1921	1
1922	27
1923	25
1924	40
1925	59
Total	152

In connection with an analytical study recently made of these cases, an attempt was made, by referring to the literature, to arrive at some definite figure that would express the relative frequency of this particular condition among survivors from an acute attack of encephalitis. Opinions as to its frequency were both abundant and extremely diverse. Exact figures were rare. It appears from a critical survey of these opinions, and such frequency estimates as are available, that certainly ten per cent of those persons that survive an acute attack of encephalitis lethargica will at some time thereafter develop the Parkinson syndrome. The mortality rate of the acute attack is more readily and definitely determined, and is about 20 per cent.

If these two frequency rates are applied to the number of cases of Parkinsonism after encephalitis that have passed through this clinic in the last five years, an interesting, and possibly a moderately startling, result is obtained. The 152 cases represent the 10 per cent of surviving cases that developed the syndrome. It follows that there were 1520 acute cases that survived. To this figure must now be added the number that died;—this brings the total up to 1,900 cases. We hasten to remark that no claim for scientific accuracy is made for these computations. The 152 cases of Parkinsonism is a fact. To repeat, the mortality rate of 20 per cent for the acute cases is sufficiently accurate for the purposes of this paper. The principal point of vulnerability is in the frequency rate employed for the Parkinson syndrome. If one of the highest estimates noted in the literature for the frequency of the Parkinson status after encephalitis had been used, the final number of cases of acute encephalitis represented by our 152 cases of the sequel would be approximately 800. On the other hand, if the lowest percentage frequency rate for the sequel under discussion had been applied, the total of acute cases represented would have mounted to five thousand. We have deliberately expressed the divergence of opinions and actual percentage rates stated, and referred to previously, in this manner for purposes of impression. The reader may exercise free choice and make the number of cases anywhere between these limits. Such a procedure will not impair the primary object of this communication. Having pondered the available data with some care, we are quite convinced that there has been at least 1,900 cases of encephalitis lethargica in Michigan in the last five years.

What is the most probable explanation for the great discrepancy between the num-

ber of reported cases of encephalitis lethargica in Michigan and the obviously very much greater incidence of the disease? It will be noted that the number of deaths from encephalitis approaches very closely to the number of cases. This suggests that the occurrence of the disease is only being reported when it results in death, or that only the most severe cases are being recognized and reported. An examination of the records of our 152 cases of the Parkinson syndrome brought out the interesting observation that 15 per cent of them had no discoverable history of any acute illness, encephalitis or otherwise, within five years preceding the onset of recognizable symptoms of the chronic stage. This fact aids materially to clear up the question propounded above, and further clearly demonstrates that the so-called sequelae are not dependent on the occurrence of an acute invasion of sufficient severity to be clinically or subjectively recognized. A still larger group of our cases were diagnosed as suffering from influenza. The error was easily established by questioning the patient for the presence of cardinal symptoms and signs of encephalitis. The remainder, about one-half of the whole group, gave a definite history of encephalitis usually by its lay name of "sleeping sickness." A conclusion with two alternatives is thus logically deduced;—either that encephalitis is not being recognized in a very large number of cases, or that cases of the disease are not being reported and recorded in our vital statistics with the care that its importance requires.

Encephalitis lethargica is a serious medical, social and economic problem. It has a high primary death rate and 75 per cent of the survivors develop sequelae or chronic manifestations of sufficient gravity to seriously impair, if not totally destroy, the patient's ability for self-support. Indeed, many cases require continuous home or institutional care. The earlier writers considered the diagnosis of encephalitis lethargica to require the presence of the triad of symptoms;—lethargy, general weakness, and cranial nerve palsies. It is now evident that the symptomatology and signs of the disease may be extremely diverse in nature and very transient in expression. Lack of space forbids even a simple compilation of the diagnostic features that have been reported. The criteria noted above probably occur more often, either singly or in some combination, than any other. But restlessness, psychic or motor, may supplant lethargy; delirium may occur in absence of cranial nerve palsies, or the latter may be very fleeting and escape undetected. Insofar as diag-

nosis of encephalitis lethargica is concerned, the disease should be suspected in every febrile case. If in addition to fever, and possibly associated headache, there is evidence of local or diffuse inflammatory processes, within or on the surface of the brain, that cannot otherwise be accounted for, the possibility of encephalitis lethargica should be entertained.

STATE EFFORTS TO PREVENT INSANITY

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"The causes of insanity are as varied as the varying circumstances of man. Some for love; some for jealousy; some for grime religion; and some for pride have lost their reason, some for fear of wanting all their lives, and others for fear of dying every day, suffer worse than death."

The history of medicine, until the last two decades, was almost wholly a history of man's effort to cure disease; and what was the result? Written as late as 1884, the results were summed up in a treatise written by a noted therapist of the times, who said, "The clinical results of two thousand years of medical history directed along the lines of empiricism had proven scarcely more than three facts: That opium would quiet pain and lull to sleep; salts would purge; and quinine would arrest an intermittent. With what a babel of discordant voices does the medical profession celebrate its two thousand years of clinical experience."

Looking at the revolutions and contradictions of the past, it was small wonder that men should take refuge in nihilism and dream like the lotus-eaters—that all alike is folly, that rest and quiet and calm were the only human fruition. At that time learned men began to ask the question: Has the profession toiled so long and found so little? If further progress is to be made, what new paths shall be trod? Old methods must be answered, new methods must be sought out which may lead to more fruitful fields. Happily, through the great advance possible by the great discoveries in pathology and the discovery of the causes of disease, men's minds were directed more and more to the question of the prevention of disease as well as the cure of the disease. When once thoroughly entrenched in the individual, for to all it was an indisputable fact that from the standpoint of economy as well as in the saving of human lives, an ounce of prevention is worth a pound of cure. So we have come to the threshold of

the era of preventative medicine which had, until this time accomplished but little outside of the great discovery of Janner, which had practically rid the world of one of the greatest scourges of the human race.

What has been accomplished by preventative medicine in a space of time within the memory of all the older men present among the giants in disease already slain, or mortally wounded are: small-pox, yellow fever, typhus, and many others. While there are thousands of deaths from typhoid fever, diphtheria, tuberculosis and kindred diseases and all this has been accomplished against the natural conservation of every community which always raises a barrier against any, and which can only be overcome by education.

In the domain of physical medicine it is but natural that the profession should turn for relief to the same methods in the field of mental medicine, a field, as yet, practically untouched. The history of the state care of the insane in Michigan has been one of which we may all be proud. The record covering a period of forty-seven years, a history that has not been excelled by any state or country from the opening of hospital at Kalamazoo, built to accommodate a few hundred patients. The system of state hospitals and their auxiliaries have grown to nine in number and treating, at this time, over ten thousand of its most unfortunate citizens. Its equipment running into millions of dollars, yet the flow of the steady stream of human wreckage is constantly clogging its portals. Now the broad minded men have been asking the question: What shall be done to divert this stream? Immediately the question is carried from the field of curative medicine to the domain of preventative medicine.

Now in any field of human endeavor when anything is to be accomplished, the effort always is first to discover what is to be done, and then what are the means at command. A primary knowledge of the end to be accomplished, and a secondary acquaintance with the instruments to be used, are a necessity to all successful human efforts. So to divert the ever increasing stream of human derelicts, we must seek out and purify the fountain heads of the polluted stream. In other words, seek out and remove the source of pollution. First, ascertain the underlying causes of insanity; then, if possible, remove the causes.

Let us briefly review some of the more important causes that are capable of correction. Statistics show that approximately 12½% of the insanity in Michigan, in many states the percentage is still

higher, is directly caused by venereal disease making 18 per cent, or one person in eight or over one thousand. This fruitful source of supply can be controlled as any active infection when we are able to enforce our present laws under the proper authority. For if our present laws, requiring quarantines and treatment were strictly enforced to the limit in all cases, the result would be fewer, and by proper care and treatment in its early stages would be one of the most fruitful fields in the prevention of insanity.

Another source is mental weakness, for a large percent of those under institutional care are made up of the great army of morons, idiots, and imbeciles. It was once believed that the state should provide institutional treatment for all mental defectives of the state. This was before the cost and extent of the problem was computed, but when this became known, the state was forced to attempt some expedient to care for these unfortunates in some way outside of the institution. From a point of view, but also as a protection to society, it has been fairly well demonstrated that the average male moron, without vicious tendencies, who has been well trained in habits of obedience and industry, and who is protected from temptation and evil companions during his childhood, may become self-supporting member of society, all of which can be accomplished outside the walls of a state institution, or at least a short stay therein.

We also know that feeble-mindedness is highly hereditary, yet we have in most states no affective legal obstacle to the marriage of the moron, and it is doubtful that more than 10 per cent of the mentally defectives are officially recognized. And while most states have made a feeble beginning, I believe that no state has an effective workable plan for preventing the increase of the class by marriage. We have not as yet ascertained their number or location, all which could be remedied by a program I shall outline later in this paper.

Another source of the stream pollution comes from the alcoholic and drug addict, a source which is being happily purified by the stringent laws now enforced regulating the liquor and drug supply, making it impossible, or very difficult for the victims to obtain. So I believe that while the statistics of the state institutions showed that a little over 4 per cent of the insanity of their inmates were directly traceable to drug addiction, or alcoholism. The number is rapidly decreasing and in time will be entirely wiped out.

Another important factor in the cause

of insanity is the abuses which have grown up in our public schools. To quote from no less authority than Berkley, in speaking of the insanity of children, "The fault was in the system that would treat all children alike and would not even attempt to separate classes according to their mental ordering. Thus it happens that these unfortunate weaklings as far as nervous stability is concerned, at the time when growth and constructive mentality of their brains are at their maximum, and when a permanent equilibrium is not yet established are taxed and punished to the uttermost to accomplish tasks beyond their power until inevitable results which is usually beyond repair."

I find the following recorded case: A boy of a strong alcoholic ancestry at the age of eight years stood at the head of his classes and was regarded as a remarkably bright child. Under the teacher's persuasion, he strained his intellect to the uttermost to retain his position, and even after he began to show signs of failing, was nevertheless urged on by threats and promises of reward, until he became a hapless dement. The innocent victim of a criminal lack of understanding of the requirements of childhood on the part of his preceptor.

The natural egotism of childhood helps to bring about bad results, but there is an attempt to place them all on the same level. And the less proficient in mentality are spurned on by the picture of the brighter ones in class outstripping them and leaving them in lower grades. All children, entering the public school, should be examined by an expert in psychology and assigned to their various classes in accordance with their actual grade of mental acquirements, and stability. While this would be a difficult task, I believe it would be possible of attainment. A well-trained physician quickly learns to gauge the mental capacity of a child's education as now carried on with little thought of psychology. Ill usage and fright of the child by its parents is also a cause of mental disorders in children, especially of those who are of a nervous disposition, a defect in child management that can only be remedied by the education of the parents or those having the training of children.

Having painted out some of the ends to be accomplished, we will now consider some of the measures to be used for their accomplishments and we naturally turn to the great state hospitals for the insane and the men proficient in the field of psychology to direct the work, the fitting agencies through which the work may be directed. Among the agencies they shall employ the great

worth of the trained nurse, many of them already trained and educated in the state hospitals where they have been instructed in the special field of psychiatric medicine; the social worker; the teacher who should have a special course in psychiatrics which should be taught in all normal schools; the education of the parents in the simple rules of child hygiene as well as physical. The teaching through the mental clinic of the simple rules of mental and physical hygiene to all citizens and above all the use as an auxilliary of every state hospital where there can be built up a great clinical center for the assistance of the medical profession in the diagnosis and treatment of all diseases. This would act as a clearing house enabling the physician to separate and properly classify the purely mental cases from the physical. These medical centers would soon gain the confidence of the communities they serve, would remove the prejudice held against our exclusive mental hospitals, commonly referred to as insane asylums. The only institution at Traverse City, I believe the only one of its kind in the state, has been in operation for the past five years. It has been a great benefit in times of epidemic, a boon to a great many people who would have been in great distress for want of proper care, both medical and nursing, enjoy today after having treated in its short career and with inadequate room, two hundred patients, the almost unbounded support of the medical profession and largely of the Grand Traverse region. While the medical clinic has been of great benefit to the cities and counties that have requested them. It should be made compulsory for all counties in the state, the backwoods district, though sparsely settled, is oft-times in greater need than its opulent and populous neighbor.

To quote from Dr. Barrett: "The matter of our clinic is the most important thing that the state hospital can undertake and some law should be passed to make it possible for any state hospital to establish that work if it wishes. If the work is desirable, I see no reason why it should not be made obligatory by state law."

An ideal program would be: First, a complete mental surgery of the state under legally instituted authority. The local administration could be carried out by the use of existing local public organizations and societies and by properly qualified volunteers in each community. This work would be made effective by the use of suitable manuals, etc., and this should reach into the home for the education of the parents, into the school for instruction and guidance of the teacher, into the court for the legal au-

thority that have the legal care of the state's paupers and delinquents. Then in cases where parents, friends, or teachers are unwilling or incapable of performing these duties, the law should safeguard the patient by the proper means by placing them in proper surroundings, either in or out of a state institution.

The rural community could well be served by a traveling clinic, where a visit to each small town should be made at least once a year.

To sum up the ideal program now possible, includes the mental examination of school children, the medical clinic, the traveling clinic, the special class, directed training of defects in country schools, and the instruction of parents of defects. After the care of special class-pupils, special training of teachers in normal schools, census and registration of mental defects, extra institutions for the treatment and supervision of the uncured, for the dependent defects in the community, the permanent segregation of those that need segregation, the mental examination of persons accused of crime, and inmates of penal institutions, the segregation of defective delinquents in special institutions.

The above program would require team work on the part of the psychiatrists, psychologists, teachers and normal schools, parents, social workers, institution officials, parole officers, court officers. There would be a highly centralized formulation of plans, methods, authority aided by work of the community. The development of the program will depend largely upon the existing knowledge and public sentiment in the state, largely a matter of education measured by wisdom and experience of the officials having in charge the work of state hospitals. Nearly every state has some program, but no state has anything like a complete program.

These measures if completed would so diminish the stream flowing into our state hospitals that Michigan would need no longer worry over plans for new buildings or new institutions. A great saving in expense, a saving which would pay many times over for all its expenses. When we consider the fact that many of those dying in our state hospitals every month cost the state from eight to ten thousand dollars for institutional care alone does this seem a Utopian dream. Remember the seeming impossible of yesterday is fulfilled today, a fact proven by the everyday experience of modern progress.

TEETH—THEIR USES AND ABUSES —BY YOU

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There is scarcely any value in an article about normal teeth, because so few have them; and being normal, they do not present a problem. When they are present there is also a good heredity, plus a healthy environment for the teeth and of the body as a whole. Another way of expressing it is that there is a balanced chemistry of the body, which means health.

It is to the possessor of abnormal (diseased) teeth in the mouth, the vestibule of the body, that causes and effects become matters of interest. Certainly to play the host and incubate within the mouth, potential enemies in the form of bacterial (germ) nests, that will presently overrun the entire establishment, as the saying goes, is not so good.

To present material that will enable a broad understanding of some of the happenings in civilized mouths, is the purpose of this symposium. Neither dentists, physicians nor research minds are in agreement on several factors that enter into the story of immunity or susceptibility to dental disease. There is, however, one distinct advantage that the dentist has in detecting trouble (diagnosis) and that is that almost always pathology (disease) can be seen in its first stages. Seeing is believing, and with the aid of the X-ray seeing all there is, visualizing any changes from the normal, can be exactly accomplished.

It is in connection with compromises with the radical cure by extraction, that makes dentistry, for the layman particularly, somewhat involved. These compromises sometimes create risks of disease in remote organs of the body, and an understanding of these risks is desirable. Organic diseases of the body that are traceable to focal (localized) infections are the outstanding facts that have broadened dental service to a co-operative attitude with the physician. Restorations (bridges, crowns, etc.) in connection with "Dead Teeth" are exceedingly risky procedures, entailing at best, periodic check-ups, with the X-ray. The risk is not so much the possibility of loss of the teeth, but liabilities, in that such teeth very often do not give warning symptoms, such as pain. However, symptoms or pain may develop in connection with some other part of the body, traceable to the teeth; but it is then, rather too late for preventive dentistry or medicine.

There is a great deal more to dental pro-

phylaxis than the popular impression in connection with the use of a local agent in the form of a dentifrice by the patient, or indeed, the use of any similar agent, by the dentist. If this were not true, the tens of millions spent on dentifrice advertising copy would turn the trick and put the dentist out of business—some say a desideratum devoutly to be wished. In point of fact, this dentifrice copy has been a boon to people, and incidentally, to dentistry, because it has caused people to think about their teeth. Dentifrices have their place, but 90 per cent of the commercial claims made for them is pure buncombe.

An Egyptian, by the name of Aesculapius who lived several thousand years ago, expressed the belief that "Diseases must be combatted in their origin." There is no more classic proof that this "ancient" knew his stuff than the modern discovery of the elective or selective action of bacteria. The elective action of the vegetable organisms known as germs, means that they, like humans, camp where they are welcome and comfortable. A local infection in or around the teeth means that the host is supplying food, warmth, moisture, etc., is in fact, an incubator for a great variety of unfriendly organisms. The germs bred in these areas can be traced in their migrations, through the circulations of the body, to remote organs where various diseases are established.

To prevent disease is the biggest thought today; but to cure disease that has been established, among other methods, the treating of it to its origin, and combatting it there, is a sound procedure. Better still, is an understanding of the principles of prevention that will materially aid in preventing the establishment of dental disease. Because teeth that are normal or approximately so, and numbering 32, are so infrequently found in the mouths of moderns, an understanding of prevention, of cause and effect can only be arrived at, by a comparison of normal function (use) with disfunction (disuse) of the teeth in relation to the body as a whole. There can be no understanding of the health of one part of the body without a conception of the body as a unified entity.

The principle function or purpose of teeth is to finely subdivide food. With the vestibule of the body idea in mind, it is in the mouth that the first chemical reactions of food should be started toward a balanced chemistry, that changes with every inch of the 27 feet comprising the food tract. Physicians are constantly speaking of "vicious circles" in connection with disease. Starting with normal teeth that are not used to finely subdivide the chemical materials that

are put in the mouth in the form of food, there may be started in the only three inches of the 27 feet, that will controls, a "vicious circle" that comes back to the mouth and teeth, through the circulation as a penalty in the form of lowered resistance.

By finely subdividing the starches in the mouth, a ferment called ptyalin, that is present in the saliva, starts the conversion of the starch into a form of sugar, that in turn is burned up in the body to give warmth and energy. This chemical reaction, in connection with the ptyalin can only take place in the mouth. When hurriedly masticated, starch goes into the stomach unchanged. In the stomach there is a highly acid field and the action of the ptyalin is immediately arrested. It is a fact that beyond the acid field of the stomach there are other ferments, that in vigorous health will further act on starch. But for a number of reasons, it is always best to start starch digestion in the mouth. Protein (principally meat) should be minutely subdivided by the teeth, so that the digestive juices of the stomach will be able to digest or fluidize the meat without calling on the muscular coats of the stomach to churn themselves into functional frenzy or actual organic disease.

There are three major diseases of the teeth and they are all acquired through bacterial activity, that, in most cases can be prevented by the patient, in co-operation with his dentist. Dental caries (a cavity) in the crown of a tooth is due to bacteria forming lactic and other acids from enmeshed starch in the pits and fissures of the teeth—the susceptible areas. These acids dissolve out the salts that form tooth structure—largely calcium.

The coarser the food, the less denaturated or demineralized it is, and the longer it is masticated, the greater the cleansing friction on the tooth and balanced chemistry, that comes back to the tooth through the circulation. This, augmented by the proper frictional use of a toothbrush, will keep the teeth clean, so that nature's antiseptic, the saliva, can, by actual contact with the tooth structure protect it. Deposits and stains on the teeth prevent contact of the saliva. By putting one drop of iodine on two or three teeth, a visualization of the areas that are not clean, can be accomplished. A clean tooth will not take an iodine stain.

As a cavity progresses toward the center of the crown, the "nerve" becomes infected; which in turn causes bacteria to continue on up through the root canal until the bone around the apex of the root is invaded.

Then comes the dental abscess, the second of the three major diseases of the teeth.

The third disease, pyorrhea, is immediately caused, by bacterial ferments digesting the gum tissue at its junction with the root. Then bacteria and their toxins continue to invade the membrane that attaches the root to the bone socket. Shortly after this comes the "pyorrhea pocket" formed along the side of the root by destruction by bacteria of the bone, and other supporting tissues. Pyorrhea, in most of its forms, can be cured, unless complicated by some systemic disease. But the "cure" cannot be accomplished by the use of a dentifrice or mouth wash.

There are approximately 400,000,000 cavities in the teeth of the best dentally serviced people on earth. To get the correct slant on what nature is protesting about in the mouth, it is necessary to understand the significance of this decided deviation from the normal, in relation to other abnormalities that have come with civilization. Briefly they are: Denaturized food, exercise and emotions. Properly interpreted by a doctor, there lies more in those few words in regard to the co-efficients that enter into a harmonious adjustment to environment, than is popularly realized.

Modern milling and cooking processes have given us white bread, white sugar, white pastry and white potatoes (demineralized—skin removed) and has made us "white livered"—whatever that may mean. This with excessive amounts of the chemically difficult protein (meat) completes the picture of mineral starvation that "nature is protesting about in the mouth."

In the quest for sound food, shelter and clothing—exercise is the dominant activity of primitive people. Primitive people have relatively sound teeth. With moderns, it is difficult to secure compensating actions and reactions of an emotional nature, in connection with the procuring of the necessities of life—emotions that automatically satisfy emotional desire of the individual, the family, the tribe, etc. No longer, in urban life, is there the chase to procure food, from the animal kingdom, or exercise in planting and harvesting from the vegetable kingdom, in order to eat. Literally and scientifically, "Ye shall live by the sweat of your brow," is proven in human experience. As stated in the first paragraph, these things contribute in total "physiologic" balanced chemistry of the body as a whole, and of the teeth as a very important part of the body.

Editor of The Journal:

Dear Doctor:

I am sending you the enclosed article at the suggestion of several of my medical friends—they apparently thinking that there are some points made that might be of interest to you.

Inasmuch as this manuscript was intended for a lay publication, I frankly state that my personal reaction to their suggestions is that any points of interest that I may have touched on, have lost their value to you, because of non-technical treatment.

However, to you as an editor of an important medical publication, I do want to emphasize that I believe I express the opinions of a large number of thinking dentists when I state, that there is need in dental ranks for a fostering of what may be expressed as a "Medical attitude towards dental pathology."

There is considerable propaganda in dental ranks to delete the term "dead tooth" from literature. While I am not prepared to offer statistical case histories in an offhand manner, I will venture to state that something like 80 to 90 per cent of all treated (dead) teeth sooner or later develop pathology beyond their apices. Granting that this estimate is correct, to my mind the status of the "dead tooth" is definitely established. I may add that in my practice I do my own extracting.

Just one more point; I am a member of State and National Dental Societies. This point may be verified by calling Dr. James Locke, President-Elect of our State Society. Dr. Locke is practicing in your city.

Sincerely yours,

L. I. Luton.

THE JOURNAL
IS
YOUR FORUM—
WE INVITE YOU
TO UTILIZE
IT FOR THE
EXPRESSION OF
YOUR VIEWS
ON
MEDICAL SUBJECTS

PUBLIC HEALTH ACTIVITIES

Edited By

MICHIGAN DEPARTMENT OF HEALTH

THE EFFECT OF SEWAGE AND INDUSTRIAL WASTES ON THE DISSOLVED OXYGEN CONTENT OF CERTAIN MICHIGAN RIVERS

A PRELIMINARY REPORT

At various seasons of every year fish are found dead or dying in a large number of the rivers of lower Michigan. It is known that the dissolved oxygen content of a stream is very closely related to the plant and animal life of that stream. This led to an investigation of the relation between the oxygen and the sewage and industrial wastes in these streams.

Under optimum conditions, water does not hold in solution a very large amount of oxygen and the amount it will hold at the point of saturation depends upon the temperature of the water. At 0° Centigrade the point of saturation for oxygen in water is 14.62 parts per million, while at 30° it has decreased to 7.63 parts or a decrease of about one-half.

This small amount of oxygen is sufficient to support the life in the stream, but water seldom carries this amount. This is particularly true of the rivers of the lower peninsula of Michigan. The polluting material discharged into public waters is usually an unstable organic material which, in the process of decomposition or oxidation to more stable forms, removes the oxygen from the water. Some shallow and swift rivers are quick to recover by reaeration from the effects of this pollution, but the more sluggish streams and the deep holes in many of the others do not recover so quickly. Consequently we find a depletion of the oxygen content and a loss of life in the stream.

The dissolved oxygen determination on the water indicates the ability of a river to support life and to recover from the effects of pollution. The biochemical oxygen demand determination on the water indicates the degree of pollution already present. The oxygen demand determination also is made on any particular waste to indicate the degree of pollution that can be expected. These two tests, therefore, are extremely valuable in the study of stream pollution.

Complete surveys are being made of the principal rivers in Michigan at various seasons of the year. The method of procedure and the results of the dissolved oxygen determinations in a series of surveys on por-

tions of two rivers, the Saginaw and Huron, are given below as a preliminary report on the work in progress.

METHOD OF PROCEDURE

Before the technical survey was started, a study of the Saginaw and Huron river basins was made. This study included a mapping of the entire basin showing the river and its tributaries, the towns and cities, and a list of the industries on the streams in each basin.

After this study was made, sampling points were selected with a view of including the municipalities and industries between the points in such a way as to be able to follow the effects of the polluting materials discharged by them. When possible these sampling points were bridges because of their accessibility.

A series of samples were taken at these points under varying conditions. The analyses made included bacteria counts, dissolved oxygen and oxygen demand determinations. Samples of the wastes from the different municipalities and industries also were examined.

The methods used for all determinations are those found in the Standard Methods of Water Analysis by the American Public Health Association. The dissolved oxygen determinations were made in the field.

A special sampler was necessary for taking the sample of water for the dissolved oxygen since extreme care must be taken to avoid letting the water for analysis come in contact with the air. The water first entering flushes the air out of the bottle so that the sample finally taken does not come in contact with the air in any way.

SAGINAW RIVER SURVEY

River Basin—The Saginaw river proper is about twenty miles long, beginning just a few miles above the city of Saginaw and flowing through Bay City to Saginaw Bay. The current is very slow and sluggish and often is backed up stream by the wind forcing the water from the Bay into the river. The principal tributaries of this river are the Cass, Flint, Shiawassee and Tittabwassee rivers. In all, the drainage basin covers an area of about 6232 square miles.

Dissolved Oxygen Content—The dissolved oxygen content of the Saginaw river

proper varies considerably and is greatly influenced by the pollution entering it from the cities of Saginaw and Bay City and the many industries on its banks. Table I shows the dissolved oxygen content for various seasons of the year. The results given in these tables show very plainly that the lowest oxygen content is found in winter time, series A and B, when an ice covering is on the river. This covering completely shuts off all possibilities of aeration. As long as the weather remains cold, however, the unstable polluting material remains practically inert as is shown by the relatively higher oxygen content in series C of the table. The temperature of the air at this time was below 0° C. Also in the summer, when there is plenty of aeration, the oxygen content is still higher as is shown by series D, E, and F. The crucial time comes when warm weather and ice covering are simultaneous. The results of this combination of circumstances are indicated in series A and B. Warm water coming from up-stream where the water is too swift to form a good ice covering, flows under the ice in the Saginaw river. Oxidation of the sludge and polluting material starts with no opportunity for aeration.

HURON RIVER SURVEY

River Basin—The drainage area of the Huron river is much smaller than that of the Saginaw river, covering only about 54 square miles. The tributaries are all small and are, for the most part, small outlets to the many lakes found in Livingston and Oakland counties. The portion of the river included in this survey is not more than 15 miles in length and includes the villages of New Boston and Flat Rock and one important industry.

Dissolved Oxygen Content—In the Huron river, between Belleville and Lake Erie a situation is found which is entirely different from any found in the Saginaw river. The extreme pollution in this case is caused by an industrial waste and is cited because it shows the effect of low water and high temperature upon the unstable polluting material as is indicated by the dissolved oxygen content of the water in the river.

The results of a series of surveys are given in Table 2. It will be noted that at times the water in the river at some points was entirely depleted of its oxygen. In this case the polluting material was discharged periodically as is indicated by the results on different series of samples. Series A, B, C and D indicate the oxygen content of the river without the presence of a large amount of the waste. Series E, F and G show the effects of the waste. In series G, undoubtedly, the samples were taken just after a periodic discharge of this waste near sampling point 1. Series F shows the lowest oxygen content to be down-stream. In series E, the sample showing the lowest oxygen content was still farther from the source of pollution.

COMMENT

It is an interesting fact that the lowest oxygen content of the streams was always accompanied by the death of large numbers of fish.

SUMMARY

A study of the dissolved oxygen content in a series of surveys of portions of the Saginaw and Huron rivers is reported.

The findings in this preliminary study indicate a definite relation between the presence of sewage and industrial wastes and the dissolved oxygen content of the streams.

TABLE I
THE DISSOLVED OXYGEN CONTENT OF SAGINAW RIVER

Sampling Points	Jan. A % Sat.	Feb. B % Sat.	Feb. C % Sat.	June D % Sat.	June E % Sat.	July F % Sat.
1. Old Belt Line Bridge above Saginaw.....		31.2	59.2	65.0	83.7	59.0
2. P.M.R.R. Bridge in Saginaw.....		25.7	51.2	49.4	76.0	57.7
3. 6th St. Bridge below Saginaw.....			45.1	47.0		
4. One mile below 6th St. Bridge below Saginaw.....				37.4	37.1	32.1
5. Zilkauke, four or five miles below Saginaw.....		19.0	50.5		45.6	74.6
6. Cass Ave. Bridge above Bay City.....	27.4	15.9	43.7	81.9	80.6	57.7
7. 3rd St. Bridge in Bay City.....	18.5	7.6	43.7	80.8	70.7	46.2
8. Belinda St. Bridge, Bay City.....			42.4	72.6	65.8	45.3
9. D. & M. R.R. Bridge below Bay City.....	5.5		39.6			
10. Kavanaugh Dock, Essexville.....	1.4		40.3			
11. Bay City Boat House at Saginaw Bay.....	2.7	5.6			68.2	44.1

TABLE II
DISSOLVED OXYGEN CONTENT OF THE HURON RIVER

Sampling Points	June A % Sat.	Sept B % Sat.	May C % Sat.	Nov. D % Sat.	Sept. E % Sat.	Aug. F % Sat.	Aug. G % Sat.
1. Edison dam below Belleville.....	69.0	41.0	82.0	77.8	60.5	52.7	68.4
2. One mile below Edison dam.....	60.0	39.8	58.0	68.1		55.3	0.0
3. Mill dam above New Boston.....				61.6		26.2	19.3
4. Bridge at New Boston.....	48.0	30.5	52.0	67.3	17.3	9.7	34.6
5. Bridge halfway between New Boston and Flat Rock	49.2	32.8	49.0	71.4			
6. Dam at Flat Rock.....	46.5	36.7	49.0	56.7	0.0		65.0

NOTE—Results given in percent saturation of oxygen in water at the temperature of the water at the time the sample was taken.—E. F. E.

REGULATIONS GOVERNING MIDWIVES

While the number of midwives in Michigan is decreasing, the fact remains that 3,594 births were reported in 1925 by midwives. Realizing the need of some control over these women, the Michigan Department of Health has adopted a set of "Regulations Governing Midwives" which have been sent to all midwives reporting births in the State of Michigan outside of Detroit, as this city has its own local regulations. The regulations issued by the Michigan Department of Health emphasize the fact that all midwives are required by law to:

(a) Report to the local registrar within five days all the births which they attend.

(b) Use 1 per cent silver nitrate solution (furnished free by the Michigan Department of Health) in the eyes of the newborn to prevent blindness.

The regulations also stress the need of cleanliness about the person, clothing, home and equipment of the midwife, and instruct the midwife that she must not make any internal examinations or administer any drugs before, during or after delivery except external antiseptics and prophylaxis in the eyes of the newborn to prevent blindness; and must not attend any case if she (the midwife) has any communicable disease. She is instructed to call a physician for any abnormal conditions before, during, or after confinement, and the abnormal conditions which might arise are named in detail.

These regulations are not in any way intended to constitute a license to any individual to practice midwifery, nor is there any intention to give a course in midwifery, but the object is to inform the midwife as to her limitations, and particularly, to emphasize what she is forbidden to do in the care of the mother at childbirth.

Although the Regulations Governing Midwives were only sent out to midwives in the latter part of January, 1926, a most gratifying response is already being received in the shape of requests for silver nitrate solution and birth certificates from midwives who have received the copy of the Regulations.

A nurse who has made a state-wide survey of midwives in Michigan has been appointed as Inspector of Midwives, and her duties will be to visit the midwives in their homes, inspect their homes and equipment and inquire as to their moral character and standing in the neighborhood. Since midwives have been notified that they would be subject to inspection by a representative from the Michigan Department of Health, many have signified their intention of giving up the work, and while some of these

will doubtless continue the practice, it is hoped that these measures may result in the gradual elimination of the unfit, and a raising of the standard of those who continue to practice midwifery in the State of Michigan.

—L. R. S.

PRELIMINARY OUTLINE OF WORK OF NEW
BUREAU OF ORAL HYGIENE AND PRE-
VENTIVE DENTISTRY

1. Get as much information as possible as to plans and programs of Oral Hygiene now in operation. Go slowly enough to build on a solid foundation as this is not a program for one year but for a number of years.

2. Develop suitable educational material for use at schools, fairs, farmers institutes, parent-teacher association meetings, etc., including material for institutional and industrial dental health purposes which would include:

(a) Posters, models, charts, leaflets, etc.

(b) Slides, films, etc., for lecture work.

(c) Suggested programs for school and other mouth health activities for different localities—city, small town, rural, county, etc. This would also include suitable cards for examinations, records, etc.

(d) Essential outfit for hygienist.

(e) Essential outfit for dentist. (Frequently school boards and other organizations contemplating starting a clinic, expend money needlessly for non-essentials and do not have the essentials. We should standardize equipment and blanks).

(f) Models and slides showing various types and procedures in children's dentistry for use in dental meetings and directions and cautions for new operators in children's dentistry.

3. Work out plans and put in operation whatever field work seems practical.

(a) By assisting localities in starting and organizing dental health activities.

(b) By providing dental health exhibit including mouth examinations at State Fair and other suitable places.

(c) By making actual demonstrations of benefits from good mouth conditions in certain schools where favorable support can be secured.

4. Gather data as to cost per child according to school census, of various types of Oral Hygiene work and results obtained as shown by actual school examinations and records noting how much each type has improved conditions according to cost per child. Figures and statistics mean little. The important items are cost and results, according to some standard.

5. Be available for a reasonable amount of speaking before schools, clubs, associations, dental meetings, etc.

6. Supervise state institutional dentistry.

7. Endeavor to keep records of all dental health activities in the state.

8. Maintain close relations with other branches of public health activities because Oral Hygiene is just one branch of public health.—W. R. D.

INTEREST IN KAHN TEST

The growing interest in various medical centers throughout the world in the Kahn Precipitation Test for the serum diagnosis of syphilis is manifested in the foreign correspondence of the Michigan Department of Health. Among those who have written to Dr. Kahn recently for assistance of some kind in making the Kahn Test a routine laboratory procedure are: Dr. Jos. A. Berlot, State Institute of Epidemiology, Zagreb, Jugoslavia; Dr. George W. Twomey, Tientsin, China; Dr. V. Nikolanka, Simferopol, Russia; Dr. S. Ramakrishnan, King Institute, Guindy, Madras, India; Dr. R. S. Gault, Port au Prince, Republic de Haiti; Dr. Wladyslaw Biernacki, Serological Institute, Wilno, Poland. A translated excerpt of one of the letters follows:

"I am greatly interested in your and other authors' articles published in the Journal of the American Medical Association concerning your precipitation test, so simple, so precise and so scientifically grounded. I should prefer to learn the technic of the test in your laboratory under your personal guidance. I shall apply all my efforts to come to your country if you will allow me to work in your laboratory."—P. L. K.

DIPHATHEROIDS

Our attention is occasionally drawn to that troublesome group of organisms known as diphtheroids. From time to time such an organism appears under circumstances which belie the benign reputation usually enjoyed by members of this group.

Recently there came to this laboratory a swab taken from a suppurating laceration on the body of an infant, delivered by the forceps method. A culture made from this material showed a gram-positive bacillus, beautifully barred, and morphologically indistinguishable from the bacillus of diphtheria.

The fermentation reactions of this organism placed it in the species group *B. hofmanni*. A pure culture of the bacillus injected into a 250 gram guinea pig killed the animal in 48 hours. The autopsy failed to show lesions characteristic of diphtheria.

The bacillus which so resembles the bacillus of diphtheria is sometimes found to be the cause of ulcerative lesions and to be markedly pathogenic for guinea pigs. Here again, the humble guinea pig decides the question as to whether the organism is or is not a true toxin producer.—W. W. R.

PREVALENCE OF DISEASE

	March Report		March 1925	Average 5 years
	February 1925	March 1926		
Pneumonia	754	1,595	847	935
Tuberculosis	434	475	406	456
Typhoid Fever	21	35	37	55
Diphtheria	382	398	340	614
Whooping Cough	1,314	1,176	364	530
Scarlet Fever	1,500	1,779	1,717	1,505
Measles	7,798	8,269	782	1,489
Smallpox	32	30	80	397
Meningitis	8	11	19	18
Poliomyelitis	3	3	3	4
Syphilis	1,154	1,214	1,301	895
Gonorrhea	1,200	711	843	717
Chancroid	3	15	11	13

CONDENSED MONTHLY REPORT

Lansing Laboratory, Michigan Department of Health
March, 1926

	+	-	+-	Total
Throat Swabs for Diphtheria				2173
Diagnosis	42	654		
Release	167	269		
Carrier	10	998		
Virulence Tests	16	17		
Throat Swabs for Hemolytic Streptococci				1506
Diagnosis	334	164		
Carrier	230	778		
Throat Swabs for Vincent's	19	673		692
Syphilis				6671
Wassermann	8	21	1	
Kahn	1263	5288	90	
Darkfield				
Examination for Gonococci	168	1368		1536
B. Tuberculosis				611
Sputum	110	469		
Animal Inoculations	4	28		
Typhoid				164
Feces	25	66		
Blood Cultures	2	20		
Urine	2	4		
Widal	9	34	2	
Dysentery				48
Intestinal Parasites				28
Transudates and Exudates				175
Blood Examinations (not classified)				558
Urine Examinations (not classified)				638
Water and Sewage Examinations				691
Milk Examinations				22
Toxicological Examinations				14
Autogenous Vaccines				14
Supplementary Examinations				369
Unclassified Examinations				861
Total for the Month				16811
Cumulative Total (fiscal year)				159787
Decrease over this month last year				8744
Outfits Mailed Out				15942
Media Manufactured c.c.				523270
Diphtheria Antitoxin Distributed, units				43168000
Toxin Antitoxin Distributed, c.c.				53600
Typhoid Vaccine Distributed, c.c.				788
Silver Nitrate Ampules Distributed				13660
Examinations Made by Houghton Laboratory				1896

Secretaries' Conference of the Michigan State Medical Society, Held at the Rowe Hotel, Grand Rapids, Mich., March 30, 1926

Dr. Jackson: The meeting will please come to order. The first speaker upon the program for the afternoon, who will now address you on "Statement of Aims and Purposes of Secretaries' Conference as Related to the State Society," is a gentleman whom you all know—Dr. Darling, our President. (Applause).

Dr. Darling: Mr. Chairman, and members, I wanted to be sure that he stated this correctly, so I turned to this and I find that he has the statement pretty nearly right, "Statement of Aims and Purposes of Secretaries' Conference as Related to the State Society."

Secretaries change, societies change, and sometimes the people change with reference to what they may think of Medical Societies and meetings. Several years ago I was Secretary of the Washtenaw County Medical Society. I did not occupy that office very long; whether I had greater ambitions, or whether the Society had greater ambitions, I have forgotten. I was intending to look over the minutes of those meetings which were sent in to Detroit for publication, but I was afraid to look at them for fear I might read between the lines the real reason why I ceased to be Secretary of that County Society.

The reason for such meetings as we have here today may be classed as two-fold: One is that you have come here to get the aims and relations of the State Society; also the aims and relations of the American Medical Association, what they are trying to do. That is one thing for you to get, the trend of Medical Society meetings, and what they mean, and carry that back to your County Society. Much will depend upon the manner in which you accept these things which you gather here as to what you can carry back. Another reason for your being here is that as Secretaries you bring to us, to the Council, to those who may be engaged in the State line of work, or the American Medical Association, some of the ideas of your local Societies; which you need, what you want done for you, and what your Society wants done, as a Society, what they would like to have done for them. The organization of medicine has become a real live thing, especially in the State of Michigan, and the real life of this Conference will depend on how much push and energy the Secretaries

of the various County Societies gathered here will put into it. Now that is why you are here. Our aim is to see how much energy can be expended in putting this plan over. Well, what is our plan? It does not matter so much about the plans and purposes, but you are to carry these back and you must gather enough force, after you have heard these plans, to carry it back and see that it is properly put to your Society so that it can be accepted.

Now there are some things that I have in mind about this organization. There are four things which enter into the practice of medicine, or the organization of medicine. There is the doctor, the public, the hospital, and the nurse. All of these are closely related, and they are becoming more closely related all the time. They are so closely related that a committee was appointed by the State Society at the last meeting to take up this nursing situation. I had the privilege the other night of talking before a district meeting of the nurses, and of being present at their business meeting, and it would astonish you if that could be printed, to find the things that they have in mind, about the eight hour day, about whether a nurse shall work here or work there, and all of that. It was very much more like a labor union-meeting than it was like a meeting of nurses. I told them so, too. I told them that this meeting was pending here before the State Society, and that this committee had been appointed, and it will depend on most of the Societies of which you are Secretaries what you will be able to write into this committee and state your ideas regarding the relations of nursing to your practice. Now these things ought to be attended to. These personal matters should go to the committee, if you have any thoughts regarding this relation. Then we have the hospitals; many of the hospitals in the state are teaching hospitals. Every hospital that has an interne has become a teaching hospital, that is, one that is carrying out the prescribed internship of the examining board. These hospitals have been regulated by the College of Surgeons to some extent. There are other hospitals that the College of Surgeons will not see. There are some organized that are caring for patients that you would not want to see, or the public would not care to see, would not want to be there.

These hospitals should be noticed in some way by the Council of this Society. I don't know just how, but there should be some way of getting at these hospitals, as to what they are doing, what they contain. Every practitioner ten years from now will have to be affiliated with some hospital, some hospital in the state; that will certainly come about, I can see that coming, and you must look to it very carefully that the hospitals do not become the directing points for your medical profession. You will have to be watching out for that, because there is a tendency for that to grow in that way. This thing has to be guarded at all points, and the only way that this can be controlled or watched out for will be by the alertness of the secretaries when they come to these meetings, bringing information as to what is going on in your county, what new hospitals have been founded in your county, or where hospitals should be located. It seems to me that the State Society could use a great deal of influence in regard to the location of hospitals in an advisory way. And then about the staffs which go in connection with these hospitals. Now these are some of the things that we will touch upon sometime later, but I want you to get this one thing about the "aims": That you are to watch for the aims as they will be put forth by the men interested in the American Medical Association today, and also such things as you hear here, and carry them back with you and tell them in a forceful way to your whole Society. Also don't be afraid to speak up if there is anything that transpires here concerning medical questions which you do not approve of, or which you think that the State Society would not approve of. (Applause).

Dr. Darling: The next speaker is one of National reputation. He has been connected with the American Medical Association so long that he simply belongs to it. The title of this paper is "A Practical Forecast for Scientific and Organized Medicine." Dr. Warnshuis.

Dr. Warnshuis: Mr. President, Dr. Cramp and members of the Council and Secretaries of our State organization: I still hold my residence here in Michigan, and not as connected with the American Medical Association as Dr. Darling intimated.

Two years ago, I think it was, that we started this first series of Secretaries' Conferences, it being felt by the officers of the Society and members of the Council that it would be well if at least once a year the men who are the wheel-horses of our organization in Michigan could get together and become acquainted with some of the problems

that confront us in organized medicine, as well as solving the problems and putting that solution in the field of activity. So these conferences were started some two years ago, and the Council has perceived pretty clearly that resulting from each one of these conferences great good has come from them, with renewed organizational activity throughout the state, and that is the reason, as Dr. Darling has just told you, that we are meeting here today.

On the former occasions we have had some stated or formal papers presented by various Secretaries, setting forth their individual experiences and difficulties in their respective counties. This year in arranging the program we thought it would be a greater benefit if we resolved ourselves into a round table discussion, where each one could take part and present his experiences, his difficulties and his misunderstandings, particularly of any of the organized medical efforts that he is seeking to put over in his county, so that we might be of mutual help. I am not going to try and give you a practical forecast for scientific and organized medicine. To do so would lead us into a discussion that would cover every field and avenue, not only of medicine, but of the public and society in general. Having served as Secretary of the County Society, as has Dr. Darling, for five years, and then being permitted to serve for a number of years as Secretary of our State Society, I know the troubles and problems that present themselves to each one of you, the time and effort you devote to the work, and the thanks you get for it. However, I feel you and I are both making a contribution that we ourselves may not quite appreciate, but which nevertheless is a motivating factor in the progress that we are accomplishing and recording in organized medicine today. The day is past when a Medical Society is only a meeting of doctors to consider their clinical cases, or the theories and practice of medicine, or their personal experience. That function still exists and must be continued, because it is for our personal benefit that we must render support to that activity. However, there has been thrust upon the County Societies, and you as officers of County Societies, a new duty that the trend of the times and the change in our World conditions have brought about which makes us more than mere doctors; it makes us guardians of the public health, and along that line we must assume the responsibility and equip ourselves for the activity that we subscribe in acquainting the public with Organized Medicine's Aims and Purposes, and that which organized medicine can do for the

people of this country not only in prolonging their life, but in preventing disease and making their life more comfortable. To that end organized medicine today is setting forth on a new field of endeavor; and we in Michigan may well be proud of the fact that we are "trail blazers." I want to say, not boastingly, because I do not assume any of the credit or take any of the credit for that which Michigan is doing now; if any credit is due it is due to the members of our organization, to the officers of our County Societies, for the trail blazing that we are accomplishing in Michigan. I am telling you in the presence of Dr. Cramp that Michigan is receiving the attention of the organized profession of the country on the activities that we are carrying forth. Now we are going to succeed only as you men continue on in the future as you have in the past few years. These aims are set forth in the topics enumerated on the program which has been distributed to you. I am not going to start a discussion of them now, but I am going to close right here and refrain from saying anything further at this time, but will interject from time to time as these subjects are taken up, the points we want to put over, because if I attempted to explain them now that would finish the program and not leave anything for anyone else to say. (Applause).

Dr. Darling: The next on the program is an address by Dr. Arthur J. Cramp, Director of the Bureau of Investigations of the American Medical Association. Dr. Cramp. (Applause).

Dr. Cramp: Mr. President, and Gentlemen: I feel in coming before you today a little hesitancy, because I have no address to give you. As you know from the program, Dr. Olin West, Secretary and General Manager of the Association, was to have been with you. Dr. West is sick and yesterday just before noon he asked me to come in his place, and naturally I had no time to prepare any address, and all I can do today is to talk informally and ramblingly on the work that I know best; that is, the work that I have been engaged in now for nearly twenty years at headquarters under what we now call the Bureau of Investigation. The Bureau of Investigation is the present name of what for many years was known as the Propaganda Department of the Journal of the American Medical Association. We still have, as you know, a department in the Journal under that name. The work of the bureau grew out of the work of the Council on Pharmacy and Chemistry. That Council was founded, as most of you know, about twenty-five years ago, with the object of giving the profession the facts regarding commercialized therapeutics. As the profession was given these facts it began to take notice of some closely related facts, namely, that the medical profession was not the only group that was being humbugged in the matter of proprietary medicines. The public was also being humbugged, but with a different group—that group which we usually speak of as patent medicines. We began getting, a year or two after the Council in Pharmacy and Chemistry was founded, an

quacks. At that time we had no information on file worth mentioning on this subject. About that time I came to the Association Headquarters and was on the editorial staff of the Journal, and possibly for want of someone else to pass the thing over to, these questions were passed over to me, and I began casting around to get the material to answer the questions, and there was a hopeless dearth of material, no work worth mentioning had been done by any organization. A few states had, through either the health departments or the Agricultural Experiment Stations made an occasional analysis of a patent medicine. Practically no states had done any work in the way of driving out quackery, or even accumulating data on the subject. So that we had to start with a virgin field, but now for very nearly twenty years—it will be twenty years next December—we have been accumulating at 535 North Dearborn street, all the material that we could get from any source that was reliable information on patent medicines, on quacks, and on those broader problems of what we might call pseudo-medicine, or quasi-medical organizations. That material is, as I think all of you know, available to every member of the profession, and for that matter largely to any member of the general public who cares to write for it. We have material that has been accumulating for nineteen years and over, all of it filed, all of it indexed and cross-indexed, so that our index file today has between 125,000 and 150,000 cards in it, which allows us, without a great deal of effort, to find what we have put away in these files. Most of you probably think that the main work of the Bureau of Investigation, or as we used to call it, the Propaganda Department, is that of preparing an article each week for the Journal, and occasionally an article for "Hygeia." That is the smallest part of the work. The great bulk of the work lies in answering the thousands of inquiries that now come into that bureau. When I first went to the Association we did not get a letter from a layman once a month. Now we are answering thousands of letters every year; we are answering, in fact, almost as many letters from laymen in the Bureau of Investigation, as we are from doctors; they are pretty nearly half and half. Since the creation of "Hygeia," which has given us a wider contact with the public, our correspondence with the laymen has increased. The Bureau of Investigation is thus a clearing house of information on the subject with which it deals. It is for the use of the profession and it is for the use of the public. It is a service that is maintained at the expense of a good many thousands of dollars annually by the medical profession of the United States as a purely altruistic feature. Not only does the association not get a cent for that work, but, as I say, expends in the neighborhood of between fifteen and twenty thousands dollars annually in maintaining that service. It is true, of course, that that service, like any other service, makes friends for the Journal and for the Association. To that extent it is an asset, but in every other respect, financially speaking, it is a liability; and we find that it makes a greater impression upon the average intelligent layman when he learns that that is one of the numerous services maintained by the medical profession in the interest of the public, and in the interest also of the profession. We are getting now, and have been for the past few years, a number of groups that come to headquarters to see what is being done there. Last Saturday afternoon Professor Frank of the University of Chicago brought 50 or 60 teachers, all of them from Hammond, Indiana, that particular group. These teachers are doing extension work at the University; they are studying, of course, economic, sociological, and public health problems. This is only one of the groups that Dr. Frank has brought there. He has brought a number of other groups, and other professors of that University, and other Universities have brought simi-

lar groups at other times over to headquarters. We address these groups, the heads of the different departments, giving them in brief outline just what those departments are trying to do. Then the group is shown through the building, so that they can see what is going on. I am certain that every member of such groups becomes a permanent friend of the medical profession after having made such a visit. It is not any longer possible for the enemies of medicine to talk about the medical trust and the medical octopus and try to build up an aurific phantom of what organized medicine is. They can't do it with men and women of intelligence who have had the opportunity of visiting 535 North Dearborn, and going all through the building and seeing what is being done, and realizing that the medical profession has nothing to hide, that it lays its cards on the table face up, and that the work that the enemies of medicine would have you believe is a selfish work, is really a magnificent piece of altruism. Such visits as those make friends for the medical profession, and what is more important, make friends for scientific medicine; and such friends are necessary today, when you know how well organized the enemies of scientific medicine are. It has been my experience that a great many members of the American Medical Association and Fellows of the American Medical Association do not really understand what headquarters has to offer them in their problems. I can't tell you the various things that the Association has to offer because it will take too long, and I am not the one to speak about it. Dr. West could have given you a brief outline of all of the various services, but all that I can tell you is about the one particular niche in the organization that the Bureau of Investigation fills. The Bureau has, as I have already said, a larger amount of data on Pseudo-medicine than is to be found anywhere else in the world. That is not surprising when you consider that no other organization has attempted to do the work that the American Medical Association has attempted to do in this line; nor has any other organization begun to spend the money that the Association has spent in this work. The point is, what good does it do you? What good does it do Dr. John Doe in the field? The good is this: That when a problem comes up to you that in any way is covered by the work of the Bureau, the Bureau stands ready to give you all the possible aid and information that it has.

To come down to specific cases. Every man here, I suppose, knows of some practitioner either an osteopath, or possibly a physician who is using the so-called "Abrams Treatment" in his county somewhere, possibly a number of them. The Abrams treatment has been pretty thoroughly discussed in the Journal of the American Medical Association. The absurdities of Abrams' theories, the commercialism back of the whole thing, and the type of men that are the disciples of the Abrams' cult, have all been dealt with in detail in the Journal of the American Medical Association. That matter has been reprinted, and it is available to anyone that will ask for it, and a great many thousands have asked for it, but there are many thousand others that do not know about it and to whom it might be of value. Of course, the Abrams' cult itself is dying about as rapidly as a cult ever dies since its high priest passed over a year or such a matter ago. But there are, I suppose, fifteen or twenty imitations of the Abrams' cult on the market today, and they, because of the commercial interest behind them, are being kept alive to the best of the various abilities of those that are exploiting them. Our friends, the chiropractors, have tried to offset the great boost that Abrams gave to osteopathy, for the osteopaths were the largest group of disciples that Abrams had. The chiropractors have tried to offset that by their neuro-calorimeter, which, as some of you may know, is merely a thermophile which is applied

to the spine or on each side of the spine, and will show variations in temperatures in the two parts, so that the patient can see the little finger move and the little dial move in the electroscope that they have, to make them think something is being done. The neuro-calorimeter has also been dealt with quite extensively, and as extensively as it deserves, and material on that is available.

Getting into the medical profession itself, possibly one of the most widespread pieces of pseudo-medicine today is that of the Koch treatment for cancer, which is a distinctly Michigan product. It is a dangerous piece of quackery because the man that is exploiting it is a brainy man, an educated man. Koch has education and he has knowledge; he ranked pretty high as a physiological chemist even before he graduated in medicine, and after he was graduated in medicine about a year he began the exploitation of his so-called serum for cancer. I have spoken to several of you individually today, telling you what problems we are up against at headquarters in the way of getting data on this matter. We have, as you know, published three or four articles on the Koch treatment. That matter has been reprinted in a leaflet form, in combination as a matter of fact with another cancer cure, the so-called Glover treatment. This is a little four-page leaflet dealing with the Glover and Koch treatment. Now what the Bureau of Investigation needs more than anything else right now is to get facts from the field regarding victims of the Koch treatment. Hundreds of doctors have written in asking us about the Koch treatment, and we have sent them what we have, but comparatively few have written in telling what they know about individuals who have taken the treatment. If one half of the doctors who have had any experience with this matter would write in, we could prepare an article that would damn the Koch treatment so that it would be driven out of the United States; I feel as confident of that as I do that I am living. I know and you know that he is not curing carcinoma, but there isn't much use in merely arguing that he is not curing carcinoma from an academic standpoint. If we can collect a hundred or two hundred cases of unquestioned carcinoma that have taken the Koch treatment and died, we will then have done more to destroy the public's confidence in this sort of thing than all the articles that we could write or distribute; and I can promise you that if such data will be sent in that we will make use of it, and we will get it in form so that it can be used to protect the public and also the profession against this particularly vicious piece of exploitation. You may be interested in knowing that two members of the Chicago Medical Society have in the last week or ten days been expelled because of their gross commercialism in the use of this Koch remedy. These two men charged a working man, earning about \$150 or \$175 a month, somewhere in the neighborhood of \$300, with the verbal promise that they would cure his wife of cancer. Of course, they did not cure her, and he had to give his note for part of the money. When he found that she was not cured and that the thing was a fake he began to kick, and he came to us with his kick, and we told him to carry it to the Chicago Medical Society, and he carried it there. Then these two doctors tried to buy him off by offering to return all the money he had paid them and then some. He, very fortunately, stood by his guns and told them the story. The censor committee of the Chicago Medical Society have acted on it and have expelled the two men. That is just one instance. Last week I went through our files on the Koch remedy and picked out a number of letters, I have forgotten how many, sent in by physicians over the past four years, and in each case the doctors who said they had patients who had gone to Koch or were going to Koch, I wrote them last week asking them if their patients did go, to tell me what

the outcome was. I expect within the next week to get an answer to those inquiries. It may be a week or two before they come in, because my experience is that I may have to write three or four letters to some of the doctors before I get them to answer, although I merely asked them to make a brief statement on the same sheet of paper I wrote the letter on, and I enclosed an addressed stamped envelope, so it would not take more than a minute or two for them to make the reply if they have the information at hand. It is that kind of work that will help the Bureau and help you. Headquarters can't do it all; it is a co-operative affair, and before we can get information that will be of value to you, you have got to send us the information in the aggregate so we can collect it. The Abrams' reprint is this one, a sixteen-page affair. We have additional ones if anyone should desire them.

You may have in some of your localities this experience: The Macfadden interests may have sent their representatives to your county or to your city with the idea of staging a so-called "health-week." They have done that in many parts of the United States. Of course, Macfadden is not interested in health at all; he is interested in Macfadden. But they put up a plausible story, and usually they work through the social clubs, the Kiwanis, the Rotary, the Lions, etc. We have found that whenever such cases have occurred, if the physicians locally will write in to us we will send them a reprint that we have dealing with the whole Macfadden fakery and cult exploiting the health interests, and we will send them enough copies of those to put in the hands of the leading men of these social clubs, that Macfadden does not get any hold in that town; they fold up their tents and go somewhere else. Every state secretary and every secretary of the health boards of every state in the union has been notified of this reprint. They are not for sale, they are sent from headquarters in such numbers as may be necessary to those localities where the Macfadden interests are trying to stage their show, and so far we have been successful in heading off a number of shows. When I say "we" have been successful, we have not; the doctors have been successful in getting the stuff that they have put into the hands of intelligent men, the secretaries of the Kiwanis, Rotaries, or some of the social organizations, and when they have read this through they usually say, "Well, we don't want that sort of show in this town and we are not going to be used as cat's paws by the Macfadden interests," and as a rule the Macfadden interests then pass on.

The American Liberty League is another organization which has a Michigan stamp, by the way, because the founder of it was the quack Ensign of Battle Creek, the people that sold sugar of milk, you know, as a cure for everything that ailed you, at a fancy price. This organization is quite powerful financially. It enlists all the druggists' papers, including, of course, the Eddyites. At present in Chicago these people are carrying on an extensive advertising campaign, attempting to defeat the Bundesen campaign to get pure milk for Chicago from tuberculine tested cows. Who is furnishing the money I don't know, but I can guess as easily as you can. Obviously, of course, those that are interested in not having tuberculine tested milk for Chicago. That is only one phase of their activity. When smallpox breaks out in a given locality they will flood that locality with advertising matter urging the public not to be vaccinated. They are very strong on the anti-vaccination. These little leaflets, when put in the hands of the public, give them an idea what the American Medical Liberty League is. They see that George Starr White, who is quoted as though he were a leading authority in medicine—is only a quack, a plain, ordinary, common advertising quack, who has taken up every fad that seemed to offer any financial

return, including the exploitation of patent medicine. It brings out further the fact that the men behind the American Liberty League are this Ensign outfit, which is also another patent medicine concern, and they begin then to see the reason for the opposition on the part of the American Medical Liberty League against scientific medicine, a reason the public would not see otherwise, that is, they would not get the angle; they would suppose, or they might suppose, that the American Liberty League was a purely altruistic affair working solely on principle, but when they have read the story of the American Medical Liberty League they say, "It is not a case of principle, but a case of interest."

The Defensive Diet League of America, I am not sure many of you will have that brought to your attention, because they are working through the dentists, but it may come to you indirectly. The Defensive Diet League of America was organized by a man named Harter, who is running a dental supply journal of a commercial type, and a dental supply house. Whether Harter is merely ignorant or venal is a question that can be left to your own judgment; but that he is ignorant there is no question. His idea of dietetics and nutrition are wholly bizarre. He quotes in the stuff he sends out from men like Macfadden and McCollum, or from Tilden of Denver, or Mendel of Yale; he doesn't know the difference. That work, as I say, may not come to you, although I think it probable that it will, because you will have some of your patients—and of course what is more important, I am speaking now to a representative group, and that means that each one of you represent a large number of physicians in your locality, and my object in mentioning these specific things is so that you will pass the word on at your next meeting, if you have the opportunity, of what the Bureau of Investigation does offer. It is not merely a place that will write letters or prepare articles for the American Journal. It is a Bureau of service, of service to the profession directly, but of course ultimately to the public, and that is the whole reason for its existence.

I have brought another advertising leaflet along that may be of interest. It relates to Radium Ore Revigator. This is being published very extensively, not only this one, but I suppose there are twenty on the market. Radium Ore Revigator is a jar lined with some low grade of radio-active ore. It will, when water is poured into it, give the water a low grade of radio-activity. It gives possibly twenty millicuries in twenty-four hours. The Council on Pharmacy and Chemistry has set as its minimum standard for radium emanation generators, those that will generate not less than two thousand millimicrocuries of emanation. In other words, the radio-activity given by this device, or other devices on the market today, the amount of radio-activity is simply practically zero. You might just as well drink Lake Michigan water, which has radio-activity the same as any other kind of water. That is equally true of the radio activity of Hot Springs and one or two other springs in the country. That also means nothing, because it has not yet been shown that there is any natural spring that has enough radio-activity to have any therapeutic effect. Whatever effect you get from springs in different parts of the country, are due to different factors than the radio-activity of those springs.

Chiropractic: That does not properly belong to the Bureau of Investigation, because that being a cult with so-called colleges behind it, that together with osteopathy properly belongs to our Council on Medical Education, which is able to furnish you with information regarding chiropractic in all its various manifestations. We have a small leaflet here containing a number of short editorial comments that were prepared by the Bureau of Investigation, and

published in the Journal at different times on various phases of chiropractic, and both the Council on Medical Education and the Bureau will send those out; they are distributed by both departments. The reason that I have had them printed is because so many physicians think that anything dealing with the chiropractor must of course belong to what we call the "fake" department of the American Medical Association, the Bureau of Investigation. In a way they are right; there is surely nothing fakier. But it became necessary, because there is an educational question involved in cults like osteopathy and chiropractic, to turn over material which I had for many years in the bureau to the Council on Medical Education, the handling of it.

Then we have a number of these pamphlets which I have brought along, and which you know about; they are the regular pamphlets issued by the Bureau dealing with epilepsy, female weaknesses, etc., covering practically every field that the patent medicine faker and quack goes into. Over a million of these have gone out in the last fifteen or twenty years, and a very large proportion to the public, and the public is calling for these more and more, because it has learned about them through the school children. In the past four or five years there have been four or five authors of text books for high schools and colleges that have called on the Bureau for material to incorporate in their books. Hodgen's General Science, he was quite interested in the work of the Bureau, and asked me to prepare a chapter for his book on general science. I told him I would not prepare one, but I would go over any he would prepare and see that it was accurate and according to the facts. Hodgen did this, and we wrote him a number of things regarding different patent medicine fakes, and it has become a part of Hodgen's General Science. As a result one class alone in a single Chicago high school sent us 120 letters not long ago in one day, because they had come to that particular chapter and the teacher told each member of the class to write to the Bureau for information on some one patent medicine, and we had to give them 120 letters containing information on 120 different patent medicines, and we did it. Now, that work is good work for scientific medicine; it is good work for the public. That is only one book. Then there is Hunter's Biology. He has one or two other books on allied subjects. There are two or three other books, all of them going to either secondary schools or colleges or normal schools. That is bringing the school children and the teacher both into contact with scientific medicine through the American Medical Association. We have, as you doubtless know, forty educational posters. If you have ever attended, and you have, of course, meetings of either State or National Associations you have seen the posters of the Bureau of Investigation, or as we used to call it, the Propaganda Department. We have forty of these posters dealing in no uncertain terms very specifically with specific fakes, and those are being used in schools and colleges, county fairs, and city fairs. We will donate them to any County Society without a cent's cost to the Society that will promise to display them at any county fair or any other health exhibit that the county cares to stage or does stage. That has been done repeatedly. That work is, I think, making friends for scientific medicine. We have also a number of lantern slides that are at your disposal at a nominal rental cost, should you want to give a talk on patent medicine and quacks. This set of 62 slides is arranged so it can be used as an automatic lecture; in other words, there are legend slides as well as illustrative, the legend slide being interpretive, telling a story. But the way it is usually used is for a physician or health officer to use them and to elaborate on the legend. Those are valuable. Recently we have had the same set of slides prepared on a strip

of celluloid for one of these small projecting apparatuses that can be carried in a case about the size of an ordinary suitcase, for use in country districts where electricity is available, and there are few places today where it is not available. There you have the whole thing; you don't have to bother about renting a projecting apparatus or an operator. You can be your own operator or get a high school pupil who merely pushes the button when you want the next picture. It throws the picture on a screen. That is for rent and at the same rate as the slides. The slides are generally used where you can show in a large hall and where you have a good projecting apparatus; but where you want to use it in a small schoolroom and have some difficulty in getting the apparatus, we have the whole thing in this other form, and you can get it at the same rate, I think about \$1 a day rental is all.

Now I think that I have more than used the time that I ought to use, but if during the afternoon any question arises in your mind relative to what the Bureau is and does, I wish you would make it a point to ask me and I will do my best to tell you what we have and tell you how we can be of mutual benefit, and I do hope, in closing, that each one of you will, when you get back to your home city, make an effort to get in touch with other members of the profession who may be able to send s data on this Koch problem, as we need it. I say "we" need it; the profession needs it, the public needs it, and the only way I know of getting it is the way I am suggesting, that the profession should send it in. I thank you. (Applause.)

Dr. Warnshuis: We now come down to the real practical part of our program, and at the request of the President we are going to try and get each one of you to participate in the discussion that will now follow the outlined schedule before you. I am going to ask Mr. Harvey Smith, who is our Executive Secretary, to just cut down to half what he has written, and take up for a moment the Minimum Program, and then we are going to discuss that among ourselves and tell you a few more things about it. Mr. Harvey Smith. (Applause.)

THE MINIMUM PROGRAM FOR COUNTY MEDICAL SOCIETIES

The Minimum Program for County Medical Societies is indigenous of Michigan. It is a plan of work designed to advance scientific medicine in every nook and corner of our state, both for the physician and the individual. No "fly-by night" conclusions are involved for we believe that intelligent procedure is the basis on which this program has been adopted and advocated. The intelligent individual is considered intelligent because of ability to find common factors. His process is (1) gathering the facts involved in-so-far as possible to attain them, (2) forming a judgment and (3) acting or putting the judgment into action. If we compare this procedure with unintelligent, which is usually one of acting first, the significance of a program of intelligent procedure is readily apparent. The purpose for intelligent action is apparent not only to individuals, but to organizations, groups of

individuals, clubs, political bodies or governments. Being intelligent and educated members of the human family, nothing less than intelligent action could be or should be tolerated by ourselves, even though there may or may not be such a demand of us on the part of other members of the human family. It is our duty.

Some of the facts that have led to the establishment of a basis for the Minimum Program are as follows:

1. A wide variation in the work of the County Medical Societies.
2. The accomplishments of a Society are not based upon the size of the membership, but on the desires and interests.
3. The scientific programs are regular in some Societies and not in others. Programs are arranged on short notice.
4. No basis for constructive yearly advancement exists in programs of many Societies.
5. Most all small and medium membership Societies have difficulty in securing speakers.
6. Lack of accord and fellowship in the membership of Societies.
7. Societies have little or no relationship to the community through organizations, institutions, schools, individuals or the press.
8. Lack of faith and regard for the profession by the public as shown twenty or more years ago.
9. The sick alone have been considered.
10. The Secretary is usually made responsible for all the activity of the Society.
11. Neighboring Societies show little neighborly spirit.
12. There is an apparent lack of friendly working relationship between the medical and other professions.
13. Committees when appointed have given little attention to the work of their office, due largely to the fact that no definition of work was available or instructions were issued.
14. A number of Societies have broadened their field of activity to include the community and found the results valuable.
15. Any constructive activity on the part of any Society has improved the standing of the Society with the membership and with the community, has increased friendship in the Society, has permitted little room for cultists to practice and has put them out of business.
16. Constructive activity and proper relationship with the community has brought about constructive support from the community.
17. Investigational work on the part of the American Medical Association, relative

to physical examinations, has established the fact that the medical profession has a definite duty, to the well as well as to the ill, in every community.

To summarize these and other facts that may be added, the basis of the Minimum Program is to help the physician member advance the science of medicine and to inform the public as to its actual value to each individual and to the health of the community as a whole.

These facts resulted in a definite effort to formulate a program that would not be burdensome to any Society but would on the other hand be flexible, adaptable to any Society and meet the conditions of any Society as revealed by the facts determined within any Society jurisdiction: a program that would permit of change as new facts determined and would lend itself to progress made within the profession and in organized medicine. The result has been as you all know, the adoption of the Minimum Program by the Council and by many of the Societies of the state. For your information you may be glad to know that other states have become interested in this definite constructive activity by your State Society.

Dr. Warnshuis: Now you men know about this minimum program as it has been outlined, and a goodly number of our County Societies have adopted it, some have not. Now we would like to take up with you and have you tell us what you think about it, or make any comment that you want to, or request for information. The first section relates to Scientific Programs. Are you having any difficulty in carrying out the scientific program fully? Dr. Moore is going to say something on that.

Dr. Moore, Cadillac: Mr. Chairman and members, it is pretty hard for me to get up and say what we are doing, because it may appear or look a little like boasting, but I do think that no society or no organization or no individual can get anywhere unless he does have a somewhat good opinion of himself. Naturally, being Secretary of our Society, in accepting of that office I did accept it without thinking that I would do something to help our Society. I also have had the pleasure of working with superiors, and enjoy following out anyone's program who pretends to be and is a good leader and who has a program to put forward. When we received your program as it is outlined here, we took it up and discussed it in our Society and decided to adopt it and arranged our program accordingly. I do not know of any part of this program that is going to be difficult for us to carry out. We perhaps are fortunate in having men who are willing to give of their time and attention to carry out this program. Our laity part of the program has been carried out for some time, and we have, through various noonday luncheon clubs and fraternities and parent-teachers' associations, been able to appear before the public continually and talk on these problems. We had a very interesting program a short time ago at our noonday Exchange Club luncheon. The subject which we had up was periodic physical

examination. We had a little comedy and a little wit and humor and two dress-rehearsals beforehand, and knew what we were going to do, and we didn't repeat anything, and the doctors did very nicely, and I think made a very good impression with that group of men, and we heard some very favorable comments on it since. I am sure that we have been perhaps a little reticent, a little backward in appearing before the laity on these various subjects that they are really interested in, but I must say so far as our Society is concerned we are crowded with invitations. We have places to appear and subjects to discuss and are getting along very nicely with our charity organizations, with our health organizations, and we have a very active, working group of citizens in Cadillac. We perhaps are a little better situated than some of the smaller Societies. We have three counties in our Society and we have a nice little hospital. We have a 6 o'clock dinner to begin with, and then our round table business meeting in the dining room; then we adjourn to the staff room of the hospital and take up the hospital reports and discuss the different cases, and also have a report from each doctor on the deaths that he has had in the hospital for that month, and bring up any matters pertaining to the hospital or anything that the staff has to bring before the Society, and then we drift over from that to our regular program, and it has seemed to work out very nicely. But as far as working in and through our school system and our Red Cross and Anti-Tuberculosis Society, and being able to put over and keep the medical profession constantly before the public, we have been very fortunate. We have a school nurse in our school system; we have dental inspection by a nurse paid for by the city; we have county contract work paid for by the county. We also take on, in addition to that, a couple of our institutions, the county farm and county sanitarium, just outside of the city, and are paid for that, and we have been able to do this work. When you can do that it seems to me that we have the public with us. That is not bragging or boasting, but I think the medical profession in our county and in our part of the state has the confidence of the people, and so-called quacks, nostrum peddlers and chiropractors don't get a great ways up there. Our dental profession goes along with us very nicely. We have a social function once a year, and an annual picnic which they now plan weeks and months ahead, and of course, anticipation is the best part of any trip, and now they are kidding each other about our annual picnic that is to occur. So all in all I think I can report for our Medical Society, and I think your Executive Secretary will bear me out in the statement, that we are alive up there and are willing to do our part in carrying out this minimum program. I thank you. (Applause.)

Dr. Warnshuis: I always have had admiration for the doctors who were members of the Tri-County Medical Society, of which Dr. Moore is Secretary, because I think they are unique in one respect; they are the only County Society that causes the County Poor Supervisors to defray their annual dues to the State Society. They do the county work and charge them for it and pay their dues out of it, as they pro-rate the work among the members of the Society. They are unique in that respect.

If you will cast about you will find the public is becoming intensely eager in learning about scientific medicine, and further than that, how they can employ scientific medicine to save themselves and their

friends from disease and sickness and prolong their life. The American Medical Association, through its constituent and component associations, is stressing this question of periodic examination. It is also being stressed by our lay magazines, who are urging people to have an examination at least once a year, or as the slogan is "an examination on your birthday." As a result of this there are coming to the doctors' offices more and more people who are asking for a physical examination. That physical examination means more than to feel of the pulse, look at the tongue and ask a few questions. It means a complete physical examination, and the big complaint that has come back to men who are familiar with this situation is that the doctors are failing to render the service that the people want. As a result of that the American Medical Association created a committee on periodic physical examination, which devised a manual for the guidance of the doctor, telling him the details of that examination, and after having examined a patient to evaluate that examination to the patient by giving him proper advice. We found doctors throughout the country—not Michigan alone, but throughout the country—who are woefully negligent in this examination and are falling down and being severely criticized by the public. As a result of that we are endeavoring now to bring to the attention of the profession in Michigan, the intense importance of a complete, thorough physical examination; and at the direction of the Council of the State Society we purchased a sufficient number of these manuals, which we purpose to distribute among the members of our profession, and it is our purpose, and that is why we are taking up this question at this time, to ask your County Society during this spring of the year to put on as their scientific program at some meeting night of their Society a Periodic Physical Examination Night; to have that meeting addressed by somebody who will give you a talk upon how best to conduct the periodic physical examination and to evaluate it to the patient. Now these manuals, which we are going to present one to each Secretary here today, are available at our office, and if you will, with your program committee, set forth and designate a Periodic Physical Examination Night or afternoon, or whatever time you have the meeting of your County Society, at any date, we will not only try to help you to get a speaker for the meeting, who will discuss the subject, but we will also supply you with a sufficient number of these manuals so you can distribute them to your members. In this way you ought to be able to

get a full attendance at your County Society meeting. To further elaborate this question I am going to ask Dr. Corbus, who is not only Councilor, but also Chairman of our Councils on County Societies, to add a little to what I have said, and in the meantime we will pass these around. Dr. Corbus.

Dr. Corbus: I do not know that I have very much to add to what has already been said. However, Dr. Darling has given me a slogan, which he whispered in my ear just now: "How long do you want to live? How long are you going to live? Ask your doctor."

I doubt if there is any group of men who have more need of a periodical examination than doctors. I do not believe that there is any group of men who have more need of a periodical examination than doctors. I do not believe that there is any group of men who are more careless about themselves, about their health, than we are. I do not find very many of my doctor friends taking the time to visit this man in this hotel—I don't remember his name now—who gives these physical exercises, or going over to the gym to work, but I find a great many of my patients among the business men who seem to find time for the daily exercise. It seems to me that inasmuch as example is better than precept, it might be a thoroughly good idea if we would have a combined example by each one of us having a physical examination through a movement on the part of the County Society itself, so that each man would be required to bring in a certificate that he had been examined, in very much the same way as the school children have to present a certificate that they have been vaccinated. I suggest this, and I believe it would be a very effective way to show the public that we believe in what we preach. I believe that this book (A. M. A. Manual) will be of a great deal of value to you. The examination of the individual who does not come to you with rather definite symptoms, who does not come to you with a very definite reason for the coming, offers a greater problem for examination, it seems to me, than the patient that you are more accustomed to handle. In the first place, the individual has to be examined in rather greater detail, if you are to do a first class job, just as the patient who comes to you without definite symptoms requires a lot more time than the patient on whom you can make a diagnosis just by his walking in the room, because he happens to have a very definite ataxic gait, and then to handle that patient so that he will be sufficiently impressed by the advice that you give him to care for himself in a proper manner. I say that because if a man has a pain, and you tell him what to do for that pain, he is very likely to do what you tell him. But you, yourselves, know, as I do, that when you have something which is perhaps going to be moderately serious in the future, but at the present time is not annoying you, it is so very easy to put it off. So that you are bound to impress your patient of the necessity of doing the things that he should do to prevent something occurring which is going to be unpleasant or serious or dangerous in the future, and yet not to frighten him in so doing. In the days when the taking of blood pressure was less common than now, when it was newer than it is now, patients were made to have a great deal of concern about this because their blood pressure happened to be somewhat above normal, and even today the one thing the patient comes in to see you for, who has not any special symptoms that he recognizes as being due to something that he knows, as having had symptoms due to that certain thing before, is his blood pressure. He will say, "Doctor, how is my blood pressure?" The easiest thing with which to frighten a patient, so that it makes him unhappy, is to tell him his blood pressure is up. So

that we must be careful not to frighten unreasonably the patient, and yet to make him concerned about himself when things are definitely wrong. As you very well know, a blood pressure may be beyond the point where an insurance company feels justified in taking them, and yet the patient be in perfectly good condition; and the blood pressure may be normal and he may have a general arterio-sclerosis; he may have a kidney trouble; he may have many serious things happening to him, or beginning to happen to him in the cardio-arterial system, and yet his blood pressure is perfectly all right. So it seems to me that the fundamentals of a periodic examination is an examination in which you take time enough to give him the thorough looking over that he is entitled to have if he is sufficiently interested to come to you, and then a sizing up of the individual, as well as a sizing up of the things which you happen to find which are not entirely normal; a consideration of his habits; a consideration particularly of his eating habits; a consideration of the life that he leads, and a direction which will be put in a sufficiently emphatic manner so as to convince him of the importance of following them out. I am sure that you and the patient both will be benefitted by rather a careful perusal of this excellent plan for an efficient examination. (Applause.)

Dr. Warnshuis: Now that Dr. Corbus has finished speaking—you can never limit him to time—in taking up the other subjects of this section of the program I am going to ask the speakers to hold within the five minute limit, and when we have completed the last one of section 5, then you who have made notes, we want you to take the opportunity of asking questions or adding any comments that may occur to you.

The next phase of the Minimum Program, "Social and Informal Activities", I am going to ask Dr. Shackelton of the Kalamazoo Academy to tell us something of what they have been doing at the Kalamazoo Academy. Dr. Shackelton.

Dr. Shackelton: Mr. Chairman, Members of the Council, Fellow Secretaries: Never having been on the social committee, I want to impress you with the fact that I may not be as well qualified to speak upon this subject as someone else would be. It is well known, however, that general interest in the Medical Society has been declining for some time. It has been constantly harder and harder to get proper attendance. This may be attributed, I think, partly to the fact that during the war men were exceedingly busy and did not come out, and many of the men were away. Following that were the increased hospital activities, and the appointment of hospital staffs. The staff meetings had a tendency to take the place of the regular County Society meetings. You will notice in your staff meetings there is much less formality than in the County Medical Society meetings. It seems to me we must do something to break up the formality that has existed. Where men come together and say "Hello, Charlie," or "Hello, Bill," there is a more friendly feeling, a more intimate feeling than where men are constantly standing upon their dignity. This formality is broken down only by our social activities. Where do our social activities begin? In the first place, with the greeting and attention you give your speaker when he comes to address the Society. It is rather embarrassing for a speaker from out of the city to come in and find no one to meet him at the station, and to have to wander around at the hotel, or perhaps inquire where the meeting place is, and perhaps, as in some instances I have known, go off and get his din-

ner by himself and then go to the meeting place. There is quite a contrast shown by the way speakers are used in a town down in Indiana, where more is done for speakers than by any other Medical Society that I know anything about; where the guest of the evening is met at the train, where he is taken to the hotel and given a room at the expense of the Society; where some member of the Society is at his beck and call at all times, and where he is entertained until the time of the meeting and also until the time his train departs. That is a point I would like to impress upon you, because I have seen in our own Society and other Societies where I have been a guest for instance, where the speaker was not met, and where he was allowed to take care of himself from the time he entered town until he departed. The rest of the sociability takes place at the meeting itself. That means that the men who get together should be introduced to each other, and so far as I am concerned I think the best way to do that is by an informal dinner. During the past year at the Kalamazoo Academy of Medicine it has been our policy to have our meeting start with a dinner. So far as the meeting place is concerned, during part of the time we gave the dinner in our academy room, a caterer was employed who came in and gave us our dinner, and the scientific meeting followed the dinner. Our attendance at our meetings, held in that manner, has increased from 50 to 75 per cent. Following the dinner, which was absolutely informal, where there was joking and sociability going on, formality dropped away immediately; they were allowed to smoke cigars or cigarettes during and following the meal, and you would be surprised how hard it is to say mean words about the fellow sitting next to you, and how much higher he will stand in your esteem when you do get together in that informal way. And then following that we have tried to have an address by some layman on topics of general interest, not associated with medicine at all. That seems to set the meeting off in pretty good shape. This, of course, was followed by the scientific meeting.

After the scientific meeting no one seems to be in a hurry to get out of the room. Then once a year there has been an annual meeting at which the doctors' wives are invited, and it pays to hold that meeting; you get in trouble if you don't. We tried last year, to hold this meeting without bringing the wives, and I don't know that I was ever in so much hot water in my life. The women felt slighted at once and thought we were trying to slip something over on them; so hereafter, at the annual meeting, the women will be invited. Then once during the year, preferably in the summer time, a meeting has been held out of the city; and eventually, if we are going to carry on the social activities of the Society to the extent which we should, I believe some arrangement is going to be made to entertain them at every meeting—not necessarily at the meeting itself, but especially for the wives of doctors from out of the city. I think some provision should be made so that they may meet the wives of the doctors in town, and that some provision may be made for their entertainment. That is done in some localities, and where it is you would be surprised how much easier it is to get the doctors out to the medical meetings, because the wives are looking forward to those meetings and insist upon coming. (Applause.)

Dr. Warnshuis: I am going to ask Dr. Foster of Bay City to tell us about "Scientific Teams," which their Society has been sending out.

Dr. Foster: Mr. Chairman, and Fellow Members: Dr. Warnshuis reminded me that I was to say something regarding the subject he mentioned, "Scientific Teams." This has been developed in the Bay County Society on rather a small scale. Reciprocal meetings

have been held at Alpena. Alpena is a short distance north of us and last year was the first time we carried out this idea. We sent a delegation to Alpena; the meeting was held at a lake and it was a most enjoyable affair. Our program consisted of three papers. In October they gave us a return engagement and put on a most interesting program. There were four speakers from Alpena that came down. Now an engagement is being planned for May 20 this year and we expect a large delegation from as many of the Societies as can arrange to take a day off, and then they are coming back again in the fall. We hope to develop it further, especially with the smaller County Societies. The idea as worked out is more or less of an experimental character. The smaller Societies feel that they are a little more isolated, especially those up north; it is harder to get men to go there than for those nearer the larger cities.

Just one thing more that does not happen to bear on this subject. Dr. Moore spoke about having the co-operation of the public. I just wonder if someone can tell me how you can get the co-operation of a hard-boiled newspaper editor. We have an editor at Bay City on one of the papers, which is one of the Booth papers, who is absolutely hard-boiled. He is easy for everybody they say—although I don't believe it—but the medical profession. He says we don't advertise. The chiropractors do, they put in a full page. All we get is "Dr. Jones of Grand Rapids attended a meeting; tomorrow he goes home." Recently we raised our night rates in Bay City; we went up from \$3 until we had them up to \$7; the idea was to cut out unnecessary calls at night, and it gave rise to one of the most masterful cases of rhetorical work that I have ever read. It certainly was a masterpiece and it wound up by telling the people to be sick in the daytime if they had to deal with the medical trust. I wish somebody could tell me how to get at that editor. (Applause.)

Dr. Warnshuis: "Public Health Information and Education." Dr. Curry, of the Genesee County Medical Society of Flint, will tell us about this. Dr. Curry.

Dr. Curry: Mr. Chairman and Fellow Members: Public health information and education has always been a much mixed up problem. I think the Extension Department of the University of Michigan recognized that also, otherwise they would not have sent out Dr. Sinai along in November of last year to investigate the situation and consult with each County Society with reference to the plan of acquainting the public with reference to subjects relating to scientific men. I had a conference with Dr. Sinai at that time, and I presume the other Secretaries have also talked with him, and it was decided that we would take up the problem through the schools and the industrial plants in our cities. Dr. Cramp brought up the subject of the inquisitiveness of the high school student when he referred to the 120 letters of inquiry regarding patent medicine by high school students. If they can be interested to that extent with regard to patent medicines, why can't we educate them with regard to something more reliable. So consequently in about half an hour we secured five members of our Society who were willing to devote some of their time to speak at the high school. It was then decided it would be before selected groups. For example, the freshman high school student is a little too young, I believe, to teach these subjects to. So we decided we would begin at the eleventh grade, the last two years, when they reach the age of about 15, 16, and sometimes 17. We chose five men: One who could talk on biology, one who knows a lot about diet, one who can talk on exercise, one who is able to discuss the time-worn subject of health habits, one on first aid. Each one of these men were chosen and are limited to their

particular line of work. It was decided to start out in January and continue it on through the balance of the school year over a period of approximately five months. Five speakers would appear each four times, making twenty appearances over a period of about five months, or about once a week. This will, of course, be increased next year when the school year will be about nine or ten months, but it will be on the average of once a week. It was first suggested by Dr. Sinai as an experiment, but it was not an experiment after the first appearance. I talked with the first speaker after he had addressed the high school, and it happened to be Dr. Himmelberger. He chose as his subject those organisms which are producers of disease, and I might say that the class in biology at the high school was the class which was first selected, so that they would particularly be interested in those subjects. He said it was astonishing to look around and see the eager expressions of these high school students as he told them about the various germs that produced disease in a practical way, in a way that would appeal to them, using as few scientific terms as possible. They covered the subject of exercise, diet, habits as to health, and first aid. It has been working for two months and is working better each time. There is the same reception each time. It just refers back to the old saying that the time to inject something into the mind of an individual is when it is pliable and active, and that is while they are in the high school. It was suggested to work at it with the industrial plants. That has always been a problem in Flint; it was tried before and was unsuccessful. About the only time that it can be done is during the noon hour, and if any one of you have driven by the industrial plants during the noon hour you have seen a heterogeneous mass of about 20,000 people scurrying to and fro as they are pouring out of the big Buick and Chevrolet plants, and they are not particularly interested in listening to anyone talking on the matter of health. They are more concerned about playing cards, sleeping, or smoking. However, in order to decide whether the proposition would be successful, we have chosen two speakers, who are good speakers, and we are going to try out two selected groups in the factory, and Dr. Sinai is going to be present and circulate through the groups of men to get their impression on the various subjects. (Applause.)

Dr. Warnshuis: "Publicity, Plans and Methods in Michigan". Dr. Jackson, who is chairman of our council, will tell you something about the plans and work developed along this line. Dr. Jackson. (Applause.)

Dr. Jackson: I might emulate the example of our worthy Secretary and tell a story, perhaps to break up the monotony of the occasion. I remember that a good many years ago I was going down to an X-ray meeting at Detroit, and I met up with Dr. Hickey, whom X-ray men are likely to call "Pop Hickey". There was a paper on the program which had to do with X-ray diagnosis of acute intestinal obstruction. Dr. Hickey says, "I want to hear that paper, that is a good paper, it always has been a good paper;" and I can say that much for Mr. Smith's story. (Laughter). I would like to tell another one that I heard Dr. Fishbein tell at Detroit a few months ago, which I think is about of the same vintage. He told a story about someone who was going through a big industrial plant, and they

showed him about all the big things they had and all the different processes they went through. When they got through the man was very much impressed; he said, "about how many men work here?" "Well," the foreman scratched his head and he said, "I should say about half of them." I think that is a good deal the way with men who are interested in medical organizations, and the biggest share of that half of them that do the work are the County Secretaries. It is hard for us to get other members of the County Society interested in the purely organization work. I am much interested in this question of publicity, and was very much interested in what Dr. Curry told you was going on at Flint. This program they have undertaken to try out, if it works in Flint it will work in other cities. I agree with Dr. Curry that the high school age is the psychological time to put over the facts about the truths of medicine. The Secretary invited me to come down and read a paper and said my time would be limited to a half an hour, and I have taken the liberty of writing out what I have to say and I think I can get it in within half or three quarters of an hour—there are five typewritten pages.

From the earliest days the practice of the healing art has been considered to have about it something of the occult and mysterious. To the medicine man has often been attributed supernatural powers. The physical and the metaphysical have often been closely associated when they had to do with the healing of bodily disease. So long as the doctor assumed to cure disease by supernatural methods it was natural that he should shrink from publicity and be content to allow his clientele to indulge in whatever fancies and beliefs they might hold concerning his mysterious methods.

But times have changed. The public press and universal educational privileges for the masses have brought about an era of enlightenment. Today the schoolboy can tell you the intricacies of the radio. Men know about scientific achievements in all other fields. It is only natural that they should demand enlightenment as to the revelations of science in the field of medicine. Men have seen the conquest of disease as medical science has solved one after another the problems in its field. They have seen small pox, typhoid fever, malaria, yellow fever, diphtheria, bubonic plague, typhus fever, and many other of the great destroying plagues conquered one by one. They have seen the era of modern surgery develop with its great salvage of human life. It is natural and right that they should be interested in these things and that they should demand the truth about medical practice.

Let us consider briefly some of the ways in which the public is being educated in these matters at present.

The public schools are teaching our children the basic facts of physiology, biology, anatomy and the principles of bacteriology. Colleges more and more are emphasizing physical education and with it a knowledge of the human body. President Little, of the University, has recently proposed a plan for training women students in the essentials of the knowledge necessary for the care of the sick. His plan would make such work as require-

ment for the graduation of women from the university.

The whole modern tuberculosis crusade has been built up on a campaign of education. Everywhere the public has been told about tuberculosis. No one can doubt that the great advance which has been made in the control of this disease is due in large part to this campaign of education.

Great magazines are printing month after month articles telling the people about the achievements of modern medicine. Almost every city newspaper has today a column devoted to the discussion of matters of public and individual health.

Public health officials issue bulletins from time to time which tell the laity in their own language about public sanitation and inviting their co-operation.

Recently some of the great life insurance companies have been serving as a means of telling the public about matters of health and disease. The Metropolitan Life Insurance Company has recently been carrying full page advertisements in some of our great magazines. These advertisements tell their readers the means of preserving health and prolonging life. Presumably the insurance companies get their returns in the prolongation of the lives of their policy holders.

Recently large manufacturers of drugs and toilet articles have been approached by large advertising corporations asking them to publish ethical educational articles for purely mercenary reasons. To emphasize the correct care of the teeth and its relation to the general health is to increase the demand for tooth paste and tooth brushes. Recently the writer has had some correspondence with a representative of a large advertising corporation concerning this very plan. At the Mt. Clemens meeting of the State Society in 1924, representatives of the Curtis Publishing Company appeared before the House of Delegates asking our endorsement of this type of advertising. This endorsement was given.

I have mentioned a few of the many ways by which the public is gaining knowledge of medical matters. These methods are for the most part commendable. We may not approve of everything but I think we must agree that taken as a whole, these methods are doing much to establish the position of scientific medicine. It is certainly the plain duty of the medical profession to encourage and direct this movement. The physician has been reared and trained to avoid publicity for his individual efforts. Our code of ethics provides that we shall be judged by our deeds and not by our words. We have long felt that the doctor who advertised his ability to cure disease is the one who is least able to do it. Advertising and quackery have always gone hand in hand. For this reason it is difficult for the ordinary physician to bring himself to have anything to do with a program of publicity.

Publicity is, however, the one means by which to overcome quackery and fallacious systems of headline which are based on something else than truth. If there is any element of truth in the various systems of the healing art not within the realm of the practice of medicine, let us have the matter laid before the tribunal of an educated public opinion. Let the truth be sifted out from the bunk and the dishonesty and let the truth remain and the other meet the end which it deserves. I have felt for years that if we spent less time in legislature halls fighting legislation favorable to various irregular systems of healing and spent more time in telling the public the truth about medicine we should serve the public better.

I wish briefly to call your attention to some of

the methods which organized medicine has already undertaken to play its part in the campaign of education.

To my mind the greatest single achievement is the publication of *Hygeia*. This magazine published by our American Medical Association brings each month to the lay reader a great amount of educational matter printed in readable language and available to all. It would seem to be the duty of every County Society to make use of every possible means to increase the circulation of this magazine and to encourage the reading of it by the public. Every member of the County Society should have this magazine in his office.

The Indiana State Medical Society has for several years now conducted a press service sending out each week newspaper releases to the newspapers of the state. These articles deal with current medical matters. They are sent out under the sanction of the Indiana Medical Society. The press of the state quite generally publishes these articles.

In our own state, as you know, the Joint Committee on Public Health Education has carried on for some time a plan of University Extension lectures on medical subjects. Just now this committee is considering the practicability of adding some sort of press service to its work. I should like to ask that each County Society should interest itself in the work of the Joint Committee and avail itself of every opportunity to assist in this work.

In Wisconsin for several years one issue of the Wisconsin Medical Journal has been a lay number and has been distributed to eight thousand people. The King's County Medical Society of Brooklyn has gone so far as to admit laymen as associate members.

These things show the trend of modern times in matters medical. Let me quote from a recent editorial in the Journal of the American Medical Association. "Traditionally the mystery that has surrounded the laboratory and the dissecting room has excluded the public. For centuries the public did not care. Now it does care. If it cannot understand the whole subject of medicine, it wishes to have explained clearly such parts as it can understand. It is one office of medicine to direct public opinion in matters of health along beneficent channels to sound conclusions. Apparently scientific medicine in a dignified way is accepting its opportunity."

Dr. Warnshuis: I would just like to ask the Secretaries who are present, and the other men that are here, how many of you do take "*Hygeia*". (The members raised their hands). All right, thank you.

As Dr. Jackson said, "*Hygeia*" I think, is our biggest missionary agent that we have at our command today for the education of the public, and we are endeavoring in Michigan to put across "*Hygeia*" into the offices not only of doctors, but also among the public. The next issue of *The Journal* will contain an editorial on that subject, together with a loose insert subscription blank, which we are asking not each Secretary, but each member of the Society to at least subscribe to "*Hygeia*" himself, and if possible secure the subscription of one or two more lay people to "*Hygeia*" this coming year. If each member would secure one subscriber it would increase the subscribers

to "Hygeia" in Michigan three thousand times, and we would have three thousand missionary agents working among the people educating them as to scientific medicine, and I wish each County Secretary at your next meeting would mention that subject. You now have had the subject of the minimum program and scientific program presented by different members.

Dr. Jackson: Dr. LeFevre has a matter to introduce at this time. May he have the time now?

Dr. Warnshuis: Yes. I was just going to say that we have had this subject presented by different Secretaries. I know some of you have had difficulty with this problem and right now I want you to come and set forth your difficulties, ask what questions you may want to, in order that this discussion may bring out something that will aid you in putting the program across in your own country.

Dr. LeFevre: Mr. President, Chairman, and Friends: We all know from experience how hard it is to get County Secretaries, County Society Presidents and so on to attend meetings. It has been a pull. I had experience with it myself in trying to get a crowd up here, and I am the only one that came.

We have in our midst a man who has devoted practically, I would say, a third of his time in the interests of medicine, not only in the State of Michigan, but as a national issue. He has done it faithfully and he has done it willingly, and was always on duty when called. The Council of the State Society, which represents every district in the state, at its meeting in January considered this person as a man that was deserving of some recognition. A committee was appointed by the Chair, Dr. Jackson, to carry this out. That committee was Doctor Bruce and myself. I am very sorry that Dr. Bruce is not present today, but on my own responsibility I enlisted Dr. Charters of Detroit to assist me in this. The Council voted unanimously to present a little token as a remembrance in recognition of the work done by our Secretary and Editor, Dr. Warnshuis. I have known Dr. Warnshuis very intimately for practically fifteen years. During all that time he has been Secretary of this Society. While we may have had some little differences at different times, I think after we got through we were more loyal to each other than we were before. I have watched his work carefully, and I do not believe that there is any society in the United States that can boast of a Secretary that is any better than the one we have. Our State Journal is a journal that surpasses any state journal. It has increased in value every year since he has been in office. Today I would say that it is a journal that a doctor cannot be without; he cannot afford to be without the journal in his office. Now we have a little token here, if you will stand up, Mr. Secretary-Editor, and we hope that you will honor it, cherish it, and keep it on your finger until death. (Great applause.)

Dr. Warnshuis: Mr. Chairman, and fellow Secretaries: I do not know what to say. I have been in situations before where I managed to get out, but just right now I don't know what to say. All I can say, fellows, is that I thank you, and if what I can do in the future will equal that done in the

past, I will feel that I have done something for organized medicine in Michigan. (Great applause).

Dr. Warnshuis: I am going to turn the rest of this discussion over to Harvey Smith, and I want you and each of you to participate and tell the difficulties you have, and have the Council members who are here, and the other County Secretaries, tell you their experiences, and so have you go back with something tangible that you can put this program over in your own County Society. Right here I want to say, too, that ever since I have been connected with our state organization—that is when I graduated from the County Society work—one of the first men I met at one of these Secretary's meetings was Dr. Ward, of Owosso, Secretary of the Shiawassee County Medical Society. Dr. Ward is with us today. He probably has been Secretary longer than any of the rest of you, and I think we should be honored if Dr. Ward opened this discussion. (Applause).

Dr. Ward: Mr. Chairman: I did not come here to make a speech, and I was in hopes that I could listen all the time. However, I am willing to stand up and be shot at. I will acknowledge to having served for some time; this is my thirteenth year as Secretary of Shiawassee County. I tried to sidestep it a good many times, but never have been able to do it, nobody else wants it. So I have struggled along. There have been matters spoken of this afternoon that were very interesting to me. I suppose everywhere where there is a hospital there is a hospital staff and there is a Medical Society. The hospital staff have their offices; the Medical Society have their officers, and we have tried joint meetings, and in our little town we have a small hospital and a small nurses' lecture room, and when we have our joint meetings the room is not large enough, and we have been handicapped in that way. So we decided this year to pull away and have our Society meetings separate from the staff meetings. We are meeting in the city hall in an auditorium that is plenty large enough for all the people who liked to attend, and we have had in outsiders. At one meeting we had the clergy come in, and they were very much interested in a paper read to them on narcotics, and they showed their appreciation. The hospital staff really does not like the idea of our holding separate meetings; they want us to have joint meetings. I don't know myself what to do hardly. Our president this year is the oldest member in our County Society, and he and some of the other older members have been inclined to have separate meetings; so for the present we are meeting every alternate Tuesday, every second Tuesday. Our Society meets the first Tuesday and the staff meeting is the third Tuesday, so we have two separate meetings each month. We are getting along fairly well, and I don't know but it will work out all right. Perhaps some of you have the same problem. I noticed one of the doctors said they had joint meetings and that it worked very nicely. Somehow or other we did not hitch so very well; we did not know which was which, whether the dog wagged the tail or the tail wagged the dog. So we pulled out. I am very glad to have been here and to have heard Dr. Cramp's talk. I don't know but I am just as well satisfied, or better satisfied, than if Dr. West had been here. I was glad especially to hear his talk on the Bureau

of Investigation. I do not want to take up any more time, gentlemen. (Applause.)

Mr. Harvey Smith: We are ready for any general discussions, or detailed discussions, that may come along. I think everybody here has something to say in addition to what has been said; so don't be backward, just come forward and say what you have to say on this general section here, on the program. We haven't heard from Dr. McKean, although coming from the largest County Society in Michigan, and one of the largest County Societies in the United States, and we ought to have a word or two from him. (Applause.)

Dr. McKean: Gentlemen: I haven't anything particularly to add. Irrespective of the difference in size between some of us, we all run into the same general type of difficulties in the work that we have before us. Of course, our meetings are more frequent; we have a meeting every week. However, as is the case with a lot of other societies, a large part of our programs are made up from out-of-town men. Probably 60 per cent of our meetings are addressed by men from one part of the country or the other; in fact, we find we have to do this in order to get a great many to come. We have the same difficulty with regard to conflict with our hospital staff meetings, and we have in addition to that—I think probably we are alone in that—the conflict with our various district societies. We have the Highland Park Society, we have the West Side and the East Side, and two or three other component organizations that hold separate meetings, and each draw their quota. However, we have an attendance week in and week out of about 175 to 200 men at our meetings. While that is only about 12 or 14 per cent of our total membership, and on the face of it is a very poor showing, on the other hand it seems to be the best that we can do. Of course, we have lectures and various things that take up considerable time. At our annual program, in which we overflow our auditorium, we have an attendance of six or seven hundred, turning probably two or three hundred people away. Dr. Curry spoke on "Health Education." We have had a lot of experience with that, and particularly this year. More and more we endeavor to spread information of one sort and another among the different factories. We have had two striking experiences, one with the Edison plant, where a series of lectures were given once a week over a period of several weeks, at which time they gathered together in the auditorium of the Edison plant for the purpose of hearing this information, and they exhibited a very fine spirit of co-operation and responded in a way that was far above the expectations of the men giving the talks. On the other hand, another scheme was tried of addressing men while they were eating their lunch, and I think that plan can be dispensed with very well. Amid the guzzling of soup and the crashing of dishes, one has to speak almost at the top of his voice, and it is very unsatisfactory from the standpoint of the men who are trying to talk and those who may be expecting to get something out of it, because except perhaps the first two or three people who don't dare to make a noise, it is almost a loss of time and effort.

The question comes up as regards advertising. This is a matter I particularly like to bring up. Dr. Jackson talked along the same line. The El Paso County Medical Society in Texas just the other day sent up to me to be presented at our council meeting a sample of some of the ads they have been running in the El Paso Daily Gazette, or something of that kind, any-

way their leading morning newspaper, in which they ran about a quarter page ad, I should say eight by ten at least, and probably larger, in which they discuss for a week one particular subject, as, for instance, the "Relation of the Physician to the Lay Public," and then they will discuss the various subjects. It says underneath it, "Donated or paid for by the El Paso County Medical Society." That is, it is a system of group advertising. They have sent it up to us with some samples of some of the last few weeks as a criterion of what they are putting before the public, for our impression, and also I imagine it has gone to many other societies for their particular group impression. I should at some time like to hear Dr. Jackson and some of the other men express their opinion upon this particular mode of advertising at our meetings. There is a very divided trend of opinion on the subject. I do not think there is anything particularly that comes up now. I have been at many of these meetings before, and I have always taken a great deal back with me. I thank you. (Applause.)

Mr. Harvey Smith: Who will answer Dr. Foster's question that he raised a little while ago along this line of publicity?

Dr. Jackson: I would not want to answer it, but I might have some things to say on the subject. The problem of using the press is a complicated one. I had the privilege,—I don't know as it was much of a privilege either, but the committee asked me to appear before the editors of the smaller dailies here in Grand Rapids a few weeks ago on this question of press service in the State of Michigan, something like the Indiana service, and the reaction I got was this, that newspaper men are primarily business-men; they are not philanthropists; they are in the business to make a living, not to educate the public. If they find educating the public makes their business pay better, they will educate the public, but primarily they are hard boiled, no question about it. The first thing they wanted to know was what the doctors are to get out of it. The second question was, were there any osteopaths on this joint committee. The third thing they wanted to know was, what did the Michigan doctors think about the Texas plan of advertising. They came right back at me with that. I believe that the way—I don't know whether I do or not, but I kind of think this is what I believe, that the way to put this thing over with the press is to create a public demand for such information. I believe that by our lectures, and by a newspaper here and there that is willing to do it, if we can create a demand for information about medical matters that there will come a time when the press will print this material because they find the people want it. I do not feel at the present time that the medical profession is under any obligation to spend their good money to educate the public. I think we ought to be willing to give them this information: I think we should tell them the facts about medical science, but I think we

ought to give it to them just as fast as they want it, and not pay out our own money or bribe them to take it. That is the way I feel at the present time; I may change my mind later.

Dr. McKean: I would say on that same score that the newspaper men in Detroit—we have to give them credit for it—have been decidedly co-operative, both during our cancer week and at the time of the Medical Congress in Detroit a few weeks ago. They gave us, I think, a total of some thirty or forty columns in those two weeks of dispatches, perfectly well run, and they were put under the censorship of medical men in Detroit, so there were no false statements, and no personal advertising came into the matter at all, but they did co-operate very well and gave us some, excellent service.

Dr. Jackson: I think the larger the community, the more tendency there is to co-operate with the medical profession. Most of the newspapers in the large cities are cutting out to a great extent patent medicine advertising. I think the real rub comes in the smaller communities where the struggle for existence on the part of editors is greater. Am I right about that, Dr. Cramp?

Dr. Cramp: I believe the larger papers do give more space to things of that sort, provided the material is good copy; in other words, good copy from their point of view. I do not think they do it from any altruistic point of view; they do it because they realize they are getting information on a subject that they believe their readers want to know about. But as to the question of the financial end of it, if the material we give to the newspapers is of such a character that the publisher thinks the medical profession is trying to put something over of interest to the medical profession rather than of interest to the public, that publisher will turn it down. On the other hand, if he thinks you are giving him some stuff that is going to be eaten up by the readers, why, he will publish it. I think that is the general attitude of the publishers. There is a question always when it comes to carrying paid advertising on the part of the medical profession, the danger that the public itself may feel that if the medical profession carries an advertisement trying to tell the public what scientific medicine has to offer, the danger that there will be a feeling engendered that scientific medicine is being hurt by the cults; in other words, the public may say, "Well, evidently the chiropractors and osteopaths are cutting in on the doctors' business, because they have to advertise now telling us what they can do." I think that phase of the thing has to be taken into consideration, and the material that is submitted for publication has to be very carefully thought out so as to make it impossible for the public to get the feeling that the medical profession is trying to play the medical profession's game, which, of course, it is not. The only object that the medical profession has in giving the material to the public is to give the public the facts, but unless those facts are properly presented it is a double edged affair, and there may be a greater reaction than action.

Dr. Marsh: The way we handle our newspaper down in Jackson County, we have two or three clinics every year under the direction of the Medical Society. That is news, and the paper wants it. Then we have a publicity committee from the Society, it usually simmers down to the chairman, and he gives the paper, or sees that the editor gets the news. That is what they want in the paper, of course; and then sandwich in a little so-called propaganda, and the editor takes

it and likes it. It is a personal question between the publicity chairman and the editor.

Dr. Ward: Not all newspaper men are hard-boiled. We are fortunate enough in Owosso to have a paper that is very liberal; you will remember, Mr. Smith, when we had a conference, there was a lot of space devoted to the conference, and we have a good man editing the paper who has given us very good service. I never yet have seen any statement that was not perfectly correct.

Dr. Shackelton: I just want to put in a word. They are not all as hard-boiled as we think they are. You would be surprised how an editorial office is flooded with releases of various institutions, including medical institutions, trying to get publicity. That was very well illustrated a short time ago when the Henry Ford Hospital first opened up. Every newspaper in the State of Michigan, as well as many outside of the state, was flooded weekly with a release portraying the advantages and benefits of the Henry Ford Hospital. The editor at home got the release and published it; the second he published with a question mark back in his mind on the advisability of publishing it; when the third came through he decided it was merely Ford Hospital propaganda and threw it in the waste basket. I have had a number of conversations with him regarding the Gorgas Memorial Hospital. He said, "I threw all those in the waste basket." Yesterday there was an article in the "Tribune" covering about five inches in black faced type relative to the value of a man past fifty having a physical examination before going out to play golf. It came along at an opportune time and it was published, and a thing like that will do good. It may be that we feel they are not very much interested in medical matters, but in getting a little better acquainted with them we find that is not true, but that they are looking for things of value to the public, and the only thing they want to protect themselves against is undue publicity for the Ford Hospital, or the University of Michigan Hospital, or some other institution that is trying to get free advertising.

Mr. Harvey Smith: Is there any other discussion on the Minimum Program, on the various subjects?

Dr. Curry: I would like to ask whether these meetings were successful at the Edison plant, and what time of day they were held.

Dr. McKean: I heard the man who gave talks comment on it. As I remember, it was during the noon hour and it was given in their own plant; they have an auditorium and it was given right there, I believe, at the luncheon hour. I might say in this connection that the chief surgeon for the Chevrolet is starting something that will be sponsored by the company, in which they hope to educate their employees on these questions. The president of the Chevrolet Company expects to be present at these meetings, and I shall be glad to report on the success of that meeting later.

A Member: That will be on the company's time, will it not?

Dr. Curry: Yes, that will be on the company's time.

Dr. Ricker: Have you closed the discussion on the Minimum Program? As I sat in my office last week I thought over some things that were to come up today and I jotted a few of them down, because I can't make a speech, but as Councillor in the district which I cover, I really feel that some congratulation should be extended for the work that is being done. I may be intruding upon the program, but our Secretary told me I had to say something when I came down here, and the Chairman hasn't asked me, so I am going to tell you what I think about this "Minimum Program" right now.

Mr. Chairman—Members of the Medical Profession:

I deem it a rare privilege to have the opportunity to speak with you as County Secretaries concerning the work of the Michigan State Medical profession—jazzing up a little—and like terms—have been presented to the Council in the past two years. We have seen the handwriting on the wall. Strains of Bolshevism, and milder radicalism has shown upon the horizon at times only to be eclipsed by the untiring efforts of our County Secretaries who have responded to the call at all times. They have met Mr. Smith in almost all cases and helped in the most cordial way to save the day.

What has been the results of the work in Michigan (For I now am thinking of the District Conference). It has benefitted the general practitioner and in so doing the public. Better doctors make a better community, and the more we can give the ever clamoring public, the better standing we have with the profession. Take for example the matter of how to make an examination of a patient. I dare say this has stimulated many a physician to ask his patient to remove his coat and in a small percentage to strip to waist line, who never had time for such a thing before. It has stimulated more thorough examination. Second, it has stimulated an effort to make a positive diagnosis.

I think the recent war did more to stimulate this point in physicians, than anything in years past, but our post-graduate conferences are next. It has increased our surgical ability, and while laboratory benefits were lost art to many physicians, it has been brought to light in the last two years, and more laboratory work is being done. With all this has come a better feeling among physicians. Why? Because they must work together in order to give the best they have to the patient.

Again the social part—the coming together exchange of ideas, and the knowing of each other better—gives a greater dependency to your County Society, for the Secretary gets to know who can do things and who wants to do.

Again, as I pick up The Journal and look over the County Society news, I can almost feel the spirit of rivalry which each County Secretary has to bring his Society to a higher standard, and outdo the other fellow. I know you all as Secretaries watch with eager interest for the report of your Society in The Journal to see how it compares with the other fellow across the state. Only a few years back we had to be satisfied with Ernie Highfield's report as he was among the faithful but today we have Ernest on the run and I hope it will keep up for The Journal is the Radio for our Medical Society, and if we wish to broadcast we must get our news in to the Secretary-Editor.

Our Journal is a live wire. Look at the co-operation, with the state Board of Health—University of Michigan—co-operation with other organizations—and last, but not least, the close affiliation with the great American Medical Association.

You only have to look over a few of the monthly bulletins of that organization to find Michigan far in the lead. Yet we owe a great deal to old Kentucky, and are just now reaping the benefits of that far-seeing and pioneer in the medical work—Dr. McCormick.

So let us push forward in our campaign for better physicians and better service to all Michigan.

I cannot prophesy for future programs, but I do know that if every Secretary who is here will carry out our minimum program for 1926 we need not fear any dark clouds to appear over the future of the Michigan State Medical Society. We will

have, as I have said before, better physicians, better local Societies, better State Society with A.M.A. in the lamplight of all nations. With all this, healthier people and greater longevity, and happier community, state and nation in which to live.

Mr. Chairman: You today, from my colleagues I hope, gained some knowledge of what the examination of the well person means, and I hope you will profit by the reports given you. But the worst is yet to come. In other words, I am the member of this august body of medical men who is to tell you who should make these examinations. Of course, I know you are all men of sound mind, so I would not expect you to go to a Christian Science healer. I know a few of you would fight if I told you, you had no back-bone, or if I even insinuated you were crooked, so I would not expect you to go to a chiropractor, nor would I expect you to go to a carpenter, or brick mason just because they were specialists on joints. No, the man to make this examination is your family physician, if you have one. Of course, you all realize the good old family physician is almost obsolete with some, but he is the man who knows what time you get up in the morning, how much you eat for breakfast and how many times a week you eat at the McKinnion, how hard you work, how hard you play, how much you drink and smoke and what time you go to bed. Possibly he has opened your abdomen, looked over your liver, stomach, etc., has taken you through pneumonia and typhoid. In other words, he knows something about you, and if he is willing to give you some of his time, he can do you more good than the commercial organization who charge you \$25.00. You go to a physician who examines you. He sends a report to this commercial organization, and they have a high salaried expert who writes if anything is wrong and just what to do for it and he never has seen you. This might work with certain models of automobiles because they are somewhat alike, but no two people are exactly alike. You say, well, I went up to Dr. So and So and he said there was nothing wrong. I go down to Grand Rapids, and I must have my tonsils out before tomorrow or I will die tomorrow. Your first physician knew you well enough to know your tonsils were not to blame for the little trouble you were having, and he did not wish to tell you to stop certain parts of your diet or your mode of living, because he knew you had been doing that all your life, and the trouble had come over a period of years. A very homely example, but some people enjoy running their cars without oil and get by very well, but when the car is taken to a garage they tell you you must have new rings or pistons, because you did not use oil. Well, there is Jones, he does not use oil, he has no trouble. Jones may smoke ten or fifteen cigars a day and have no trouble, but you can not do it, and you will not listen to any advice, but have your tonsils out because something is wrong with your heart, and your physician at home knows it is from your cigars, but does not wish to start something which he knows you will not carry out.

Now, let me give you a bit of advice. Go to the physician who knows you—tell him all you think he does not know. Have him check up on you, and go to his office and talk over such things as you may find will help you to live longer., (for we all want to live) give him the same confidence you would your auto repair man,—your jeweler who cares for your \$110.00 watch—the carpenter who keeps your house in repair.

Remembering that physicians are an asset to the community, treat them as such and they will take a better interest in you, and you in them, and

jointly we will all be subjects for healthy persons examination, and we will have a better community in which we may live, and enjoy.

Do not forget the doctors are only a part of the community life, and they are here to live and help you to live—so be happy, for you have the best doctors in Northern Michigan—barring none.

Mr. Harvey Smith: Dr. Moore introduced a scheme up in his Society, along with Dr. Ricker, that I think would be fine for us all to have, but on account of time we will not ask him to tell the story as to how they organized this scheme of giving a demonstration of physical examination with the Exchange Club. We are going to ask him to write it and put it into *The Journal* so we can all have it for our own benefit when we see it in the next issue.

I am not sure whether we are closed on the Minimum Program. I will say that we are. I want to say as a last word that it has been a delight to meet the Secretaries and Officers and Counselors and see the emphasis and the enthusiasm manifested in trying to work out the Minimum Program in a form so that it fits local conditions, and I am certain that we are getting wonderful results. I know Societies are meeting three and four times as often as they did; I know they are having better scientific programs, and I know many are figuring and studying out what relationship they do have to the public. I think the State Society is to be complimented—that is not flattery either,—for having Secretaries who are trying to put the County Societies on the map, for after all the County Society without a program does not amount to anything, and the County Society unless it does carry on practically means that the State Society will be destroyed, and the State Society destroyed means that the A. M. A. can't exist. So that the County Society is the basis for constructive scientific medicine, and we have to assume that responsibility. The Minimum Program seems to be the one that is giving the ideal results thus far; it is not final, don't let anyone go away with the idea that it is final; it must be amended and fixed so that it fits as the years go by.

Now we want to close this conference in about twenty or twenty-five minutes. We have two divisions; one "The Post Graduate Conferences", and "The County Society" as the other on our program. The "Post Graduate Conferences" has these three headings: "How to Avoid Competition with County Society Activities. What Changes or Additions Would be Valuable? How May Attendance be Increased?"

I am going to ask for a free discussion. Somebody quickly say something on any one of these subjects right now.

Dr. Marsh: Due to a little correspondence I had about our Post-Graduate Conference, I would like to ask in the first place—I am ashamed to say I don't know—what comprises the 14th District.

Dr. Warnshuis: You will find it in the Advertising Section of *The Journal*.

Dr. Marsh: There has been among our County members a misunderstanding on that regarding whether Hillsdale was in it or whether we were not, or whether Washtenaw was in it or not. We knew Lenawee and Monroe were. That may have had something to do with the attendance, which was very small. That seems to be one of the misunderstandings we have in that corner of our state, as to just who to expect to be there.

Mr. Harvey Smith: The district is composed of Lenawee, Washtenaw, and Monroe at the present time. By the way, we invited Hillsdale. Is there any question on the Post-Graduate Conferences, as to how we can make them more useful, or is there anything else anyone has to suggest?

Dr. DeVries: May I ask as to who decides when to have them?

Mr. Harvey Smith: The Counselor and Secretaries, and then we have to try and fit it in for the time of meetings scheduled with other districts.

Dr. Jackson: What prompted that remark, Dr. DeVries? The Ingham County Medical Society decided to hold one; we were set for one in January. We communicated with the State Officers, and they asked us to hold off for a while.

Dr. Warnshuis: I will say Dr. DeVries was probably not responsible for that. It is quite a problem to ask men at the busy time of the year to go out, as sometimes two days are required in travel and in attendance on these conferences. We also recognize that there are some sections that need a little more crowding than others. Those that have a surplus of medical knowledge, we are letting them travel along on the knowledge they have, and are furnishing it to the others who haven't it.

Dr. Stone: I just want to say to Dr. DeVries, you don't need to feel badly about that at all, as it so happens as Chairman of the Publication Committee I am also member of the Executive Committee. With our Executive Secretary we had a meeting of all the officers in my district way back in August or September, with a definite date set for a conference later in the year, and it happened one evening we were having an Executive Committee meeting in Grand Rapids with a conference scheduled for the week following, and when I asked what the program was to be,—“Why, Hell, you aren't going to have any conference next week.” (Laughter.)

Dr. Warnshuis: This is a matter which the Council is very vitally interested in, and the County Society Committee of the Council, of which Dr. Corbus is Chairman, has given a lot of thought to the type of program

as well as to the number and time and place of meeting. We do not want to make them too common, so that it will be looked upon in a hap hazard way. We want to make it something outstanding in the medical program work in your district for the year. To that end we are directing our efforts in formulating a program that will prove satisfactory. I want to say that the Councilor of your district is first consulted in regard to the time and place of holding one of these post-graduate conferences. Then it is taken up with the Secretaries of the County Societies composing that district, the type of program is arranged and then the details for carrying it out are carried out by the officers and Mr. Smith of our office in sending out publicity notices. I think it is safe to say, Dr. Jackson, I think you will agree, that we purpose this year holding post-graduate conferences in each Councilor District of the state before January 1st. We will get in touch with your Councilor and will get in touch with the Secretaries of the Societies composing these districts, and we will try and arrange a program that will meet the needs and wants of the men in your district; and in the meantime, as we are arranging the program, if you will give a little thought to it so that when we ask you for the information you will have it for us, we will try and put on the best possible program in your district.

Mr. Harvey Smith: I want to say we are always in need of definite suggestions from the Councilors and the County Society Secretary as to some outstanding thing they would like to have discussed on the Minimum Program. So we are always ready for suggestions. I may say Dr. DeVries, that your Councilor sent in a telegram this morning saying he could not be here, but that he wished the conference in Hillsdale in June, or down in that part of the state, at some country club.

The other fact outstanding relative to Ingham County is that the State Society will be there not very many months away.

I think we can pass on from this Post-Graduate Conference, unless somebody has some contribution to make. If not, let us take a few more cracks at the County Society. What facts would aid in the formulation of activities? Who may secure them? How? How may hospital and County Society programs be supplemental to each other?

You are working out a year's program. What facts do you need? Do you need any, or do you just act? What have you to say on that point? Is there any discussion?

Dr. Warnshuis: I would like to ask the Secretaries present whether they feel it would aid them in their work if during these early spring months, and possibly the summer months as well as the fall months, if Mr. Smith would come and attend one of your meetings and spend a day or two days possibly in your locality or in your county, going over the work of organized medicine with your Society. Would you men feel that would be time well spent? Of course we are not referring to Wayne County, but would that be time well spent?

Mr. Harvey Smith: I might say along that line that I sent out about ten letters something like a month ago to Secretaries asking them to send in the announcement of their meeting, and if they had anything special in mind that I would make a special effort to get to their Society meeting. I must be in bad repute, because no one has asked me to come over. That is a problem we have had under consideration, to know when your Society meets and whether you want us to come down or not. If there are any problems the State Society can help you solve, we want to help solve them. Those are the things we are interested in. If I may say a word relative to this one part: What facts would aid in formulation of activities? Of course your Minimum Program, if you look that over carefully and study it thoroughly, you have to secure some facts, there is no question about that. But I feel, however, that very often many facts are going by the board in the community that we do not recognize—facts relative to other organizations especially; they are moving on; the public through its schools, and through the noonday luncheon clubs and other organizations are organizing themselves, trying to do something. Now then, along with that every once in a while comes the announcement that a County Nurse has been employed in the county, or a City Nurse is employed, and a number of other factors may come in. One organization after the other is doing something of interest to health; but they never, any of them, come to the County Medical Society. Why? What is the reason? Those are facts that we ought to keep in contact with and know what is going on in the community, so that we can meet those responsibilities. Some facts and questions are the basis of all activity friendship—friendship in its various phases. Is there such a thing as friendship in your Society, or is it just the opposite? Somebody said if we have to get somebody, we will have something doing. Possibly you do have something doing, but is it constructive? What kind of relationship exists be-

tween the County Medical Society and other organizations? What is the relationship between the Medical Society and the schools. What is the relation between the Medical Society and the Parent-Teachers Associations? So we may go on down the line. What relationship exists between the County Medical Society and State Board of Health or State Nurses' Association? Is it a matter of friendly attitude towards the development of constructive programs, or is it one of kicking the other organization as much as possible? All those facts should be considered in the development of programs for County Medical Societies.

Dr. Le Fevre: May I say just a word? I think one of the main features in carrying out the Minimum Program would be what we would call a "jacking up", and I think that would have to come from the State Secretary, from his office. For instance, you take the physical examination of the physicians themselves. How many have done it? I think it is time now that that should have been done, and I doubt very much if there are very many that have carried it out. And I think if Mr. Smith would drop a line to the Secretary every little while and have a report of how many doctors have been examined, and also about the other part of the Minimum Program, how much has been done, and that they would like to have a report upon it, in that way it will have to come up before the Society and keep the thing alive. I think unless that is done in a good many Societies the program will die a natural death.

Mr. Harvey Smith: I might say, Dr. Le Fevre, that we did send out a circular and got a good deal of information on the Minimum Program, but under the head "Periodic Physical Examinations", we have not seen a great deal of activity, and that is one of the things that has led the Council and the Executive Committee in bring up this subject and furnishing these booklets on periodic physical examinations, for the good of the Society and to help them along with their program. Is there anything else? Dr. Randall has a matter to present.

Dr. Randall: Mr. Chairman: During the past year there have been two of the most wonderful conferences as an evidence of the respect or the standing of the organized medical profession. One of those conferences was the meeting of the State Board of Health, the State Board of Registration and Medicine, and the Council, and the Faculty of the University of Michigan. Dr. Darling was too modest to speak about these in his talk about the profession. It is a very significant thing that the entire faculty of the University of Michigan would meet together to discuss medical examinations and post-graduate work.

The other wonderful conference was the one held at Lansing in regard to the training in laboratory technique. Dr. Ricker mentioned the fact that the more men know about scientific medicine, the more they resort to the laboratory. There are certain things that cannot be taken care of intelligently unless you do have a good laboratory, such as anaemias, cases of uremia, sugar in the blood in certain diseases. In other words, in certain cases you have to depend upon your laboratory, and this condition not only exists in Michigan, but exists all over the United States. Dr.

Warnshuis and Dr. Cramp have said that Michigan has been pioneer in several lines. Dr. Himmelberger, who is our pathologist at Flint, conceived this course from his own experience. He was originally a veterinarian; then he took up bacteriology and so on, and he has developed today into a good man, but he has had to go blundering along and has made many mistakes. Dr. Himmelberger talked with some of the men at Lansing, and finally a conference was held between President Butterfield and all the deans of the school, Dr. Davis of Detroit, Dr. Darling, Dr. Himmelberger, and myself. In that conference it was discussed what must be done. Lansing is eminently fitted to put on this course. Now the course that has been outlined cannot be put on by the University of Michigan. For instance, in Lansing they teach entomology, they teach bacteriology, they teach pathology, they teach zoology. Not only that, but Dr. Olin of the State Board of Health said that he has about thirty men in his laboratory. These men will be trained in practical work in this laboratory. After the conference Dr. Butterfield said he would put on this four-year course for high school graduates if the medical profession wanted that course, or if they would approve of that course, and I just wanted to get their approval or disapproval in order to get up a discussion, and I would move you, Mr. Chairman, that the Michigan State Medical Society, represented by the Council and by the County Secretaries, approve this course being given by the State College. Now there are two colleges in the United States that give this course, one at Philadelphia, and the other, I believe, at Boston. There is a preparatory school at Minneapolis that gives a very short course, three months. Dr. Davis, who is thoroughly acquainted with the situation, says that these graduates are absolutely no good. They have attempted to train nurses after their smattering of medical knowledge into laboratory workers. This course, if it is approved by you, will be put on by the State College, and it will be one of the other pioneer things that Michigan has done for better medicine. I make that as a motion, Mr. Chairman.

Dr. Curry: I support it.

Mr. Harvey Smith: Any discussion?

Dr. Jackson: I was invited to go to this conference at the time at Lansing, but I was not able to. It seems to me that all of us have had experience with the difficulty of getting trained laboratory workers for various communities, and it seems to me that anything which offers a solution of the problem, properly trained workers for hospitals, is worthy of our approval. I think they have the equipment, and I think they have the men to put this course on at the State College at Lansing, and I think if they are willing to do it, it ought to meet with our very hearty approval.

Mr. Harvey Smith: Are you ready for the question? All those in favor say aye. Contrary minded. The motion is carried.

Is there anything else. Has Dr. Warnshuis or Dr. Jackson a final word? If not, I think in behalf of the State Society we can thank everyone for coming great distances and small distances to help make the science of medicine more effective in the State of Michigan. I thank you one and all.

The Journal

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

PUBLICATION COMMITTEE

R. C. Stone, Chairman.....Battle Creek
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Entered at Grand Rapids, Michigan, Postoffice as second class matter.

Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 7, 1918.

All communications relative to exchanges, books for review, manuscripts, news, advertising and subscriptions are to be addressed to F. C. Warnshuis, M. D., 4th Floor Powers Theatre Building, Grand Rapids, Michigan.

The Society does not hold itself responsible for opinions expressed in original papers, discussions, communications, or advertisements.

Subscription Price—\$5 per year, in advance

MAY, 1926

Report Malpractice Threats Immediately to Doctor F. B. Tibbals, 1212 Kresge Building, Detroit, Michigan.

Editorials

A COURSE IN MEDICAL BIOLOGY—AN ADVANCE STEP IN EDUCATION

The training of laboratory workers is a subject which has of late attracted a great deal of attention and comment. The course herewith outlined, has been conceived as a result of the observation that there appears to be a great need to attract to the field of Medical Biology, workers of the type usually interested in research and study; the type of individual who usually pursues training leading to one of the Post Graduate degrees, Doctor of Philosophy or Doctor of Science, and make their training and their services available for the hospitals and public health laboratories of the smaller communities.

The present method of obtaining laboratory workers of the type characterized in the term "Technician" is unsatisfactory, to say the least. There are few, if any, definite courses of study of this type offered by the higher public institutions of learning. True, several colleges offer courses in the fundamental sciences, but no effort is made to correlate these courses to medicine in the

way of practical services. There are several private schools of laboratory technic, which occupy a position in the educational world similar to that occupied by the private medical school of years gone by, and several hospitals offer a laboratory course to nurses who have finished their nursing training. The fact that primitive efforts have been put forth by these different agencies to fill an evident demand appears to be sufficient proof for the need of the course herein suggested. Certainly a graduate of this course, holding a Bachelor's degree would be far superior to a person with a training of from three to six months.

Then there is the other more important field of the trained research worker, the trained bacteriologist and pathologist. It has been observed that the medical graduate does not long continue laboratory work as a vocation. He finds it an excellent stepping stone to medicine or surgery, both from the standpoint of training and income for the first one or two years after the completion of his medical course. This is more especially true in the smaller cities, at some distance from the centers of medical education. It has occurred to some medical men, especially interested in educational matters, that the ideal situation insofar as the future development of a given hospital laboratory is concerned would be to have the director so trained as to include the necessary medical subjects in the ordinary medical curriculum, with the addition of more basic science subjects, not found in the medical curriculum, and having the graduate possess a degree commensurate with the training he has received, but one which would never permit him to entertain the idea of entering upon the practice of medicine.

The medical graduate has not been trained with a career as a laboratory worker in view. He entered upon his study of medicine with but one purpose in mind, that of becoming a doctor, a practitioner of medicine. His undergraduate training most certainly was not intended to fit him to be an investigator. Only those who are inspired by great teachers during the undergraduate medical course enter specialized fields like bacteriology, pathology, etc. Even then, they limit their ambitions to strictly teaching and investigational positions with the larger institutions of learning.

It has been said by one of the country's foremost professors of pathology that the present method of hospital standardization whereby hospitals are required to maintain laboratories, and being unable to secure a well trained personnel, are forced to conduct their laboratory with the aid of part-time

practitioners of medicine, has a tendency to do harm, because of the questionable character of work done. In short, the mere possession of an M. D. degree does not qualify one to direct the work of a clinical laboratory.

It has been maintained by some that the solution of the problem rests in post-graduate work for medical graduates. This would without doubt be the ideal situation, providing the man so trained would not recognize his superior training and become interested in the more lucrative field of medical practice. Furthermore, the number of medical graduates who would carry their training through two or three years of post-graduate study would be so woefully small as to make the idea impractical.

There can be no doubt that two or three years served in a well equipped active hospital laboratory is an excellent preparation for medicine or surgery for the recent medical graduate. On the other hand, no one can maintain that the laboratory and its development does not suffer by its use as such a preparatory school, with the resulting frequent change in personnel. Another evil frequently met is the part-time laboratory worker who devotes a part of his time as director of the hospital laboratory while "building up" a medical practice. One so engaged is certainly more concerned with the progress of his practice than with laboratory development. He surely can be of no more than passive benefit to the laboratory or hospital staff.

The training of men and women as herein outlined, it seems, would fill a gap that now exists between the field of practical medicine and biological science. The present tendency in medical education and hospital development is to make the local hospital a continuation school, so to speak, for the practitioner of medicine. If this is not the tendency at present, it most certainly will be in the not far distant future. The presence on the hospital staff, of an individual trained in the biological sciences of pathology, physiology, chemistry, bacteriology, etc., with a correlation of these sciences as they apply to medicine, and who by his training and the degrees he possesses, is committed to a work free from the ever present temptations of a lucrative medical or surgical practice, would certainly tend to make of the laboratory, a nucleus around which the educational activities of the community would center. The course of study outlined would attract those minds interested in biology as a strict science, the investigational type of mind, which would not be interested in the practice of medicine.

The graduate of this course who pursued his studies to a doctorate, would be the connecting factor between the practice of medicine and the biological sciences. He would give to each community of 15,000 or more people, a trained research worker, competent in those sciences with which medicine as an art is so closely interwoven. From a financial standpoint, he would enjoy an income that would compare favorably with his colleagues of the teaching profession. It appears that this type of training offers a solution to the problem of supplying the smaller communities at some distance from centers of medical education trained people—with "shoe makers who will stick to their last."

Conscious of the pressing need for such a course of training, several conferences were held by representatives of our State Medical Society and the President and faculty members of our Michigan State College at Lansing. As a result we are pleased to announce that such a college course is now arranged and students may so matriculate this fall. The following is the outline:

A COLLEGE COURSE IN MEDICAL BIOLOGY

Michigan State College will offer a full college course for the training of technical laboratory experts—bacteriologists, serologists, chemists, pathologists. The course will be available for students with the opening of college in September, 1926. The course leads to the Bachelor's degree, followed by the Doctors degree after a successful, practical experience in hospital, clinic or public health laboratory.

The course prepares men and women for positions as laboratorians in hospitals, physicians' and surgeons' clinics and federal, state and municipal health laboratories. It also fits the specially adapted student for either commercial or research laboratory work requiring a technical knowledge of medical biology in its broadest sense.

The course is designed, furthermore, to give the student a liberal education since non-medical studies are included and may be elected to a considerable extent. A liberal education should certainly teach one about himself and the interesting species to which he belongs. This course does that to a superlative degree.

Entrance requirements are the equivalent of a good high school education. The prospective college student contemplating such a group of studies is advised to consult with his or her family physician or with some other forward looking medical man. From such persons advice may be obtained that will be of material assistance in making a decision. Graduates of this course may so

arrange electives that entrance into class A medical colleges is possible. *But, this course is designed to train men and women to use scientific laboratory methods to assist the medical profession in the diagnosis and treatment of disease, and not to prepare them for the practice of medicine.*

Students will have all the advantages of the well equipped laboratories and the instruction by the faculty of the college and also the opportunities offered by the very exceptional laboratories and highly trained staff of the Michigan Department of Health and the large hospitals and sanatoria of Lansing. The work will be given in an atmosphere that is sympathetic with the undertaking.

Correspondence relative to this course and opportunities for graduates may be addressed to the chairman of the faculty committee having in charge the administration of the course.

Ward Giltner,
Professor of Bacteriology and Hygiene,
Michigan State College,
East Lansing, Michigan.

* * * *

FOUR YEAR COURSE IN MEDICAL BIOLOGY

FRESHMAN YEAR

Fall Term	Credits
Mammalian Anatomy 6	4
Embryology and Histology 5a	3
Chemistry, Inorganic 1	4
English, Composition 8j	4
	15
*Military Science 1	2
Physical Education 1	1
Winter Term	Credits
Physiology 5	4
Embryology and Histology 5b	3
Chemistry, Qualitative 2	4
English, Composition 8k	4
	15
Military Science 2	2
Physical Education 2	1
Spring Term	Credits
Physiology 6	4
Embryology and Histology 5c	3
Chemistry, organic	4
English, composition 8l	4
	15
Military Science 3	2
Physical Education 3	1

*Required of men only.

PREMEDICAL OPTIONS—Students who may wish to undertake this course but who may also have in mind preparation for a medical college may make substitutions to meet the entrance requirements of Class A medical colleges. This

course is not designated especially for prospective medical students.

SOPHOMORE YEAR

Fall Term	Credits
†Chemistry, organic 3	4
Bacteriology, general 1	4
Bacteriology, parasitology 6	2
‡Elective (Entomology 11, 4a)	6
	16
*Military Science 4	2
Physical Education 4	1
Winter Term	Credits
Chemistry, quantitative 7	4
Bacteriology, laboratory 2	4
Bacteriology, protozoa 7	2
Pathology, general 1	6
	16
Military Science	2
Physical Education	1
Spring Term	Credits
Chemistry, Biological 29	4
Bacteriology, Physiology 3	4
Bacteriology, helminths 8	2
Bacteriology, Sanitary Science 14	2
Elective (Pharmacy 1)	5
	16
Military Science 6	2
Physical Education 6	1

‡The student should work off the prerequisite to medical entomology 15.

*Required of men only.

†The student not wishing, for adequate reasons, to take this and the following courses in the series in chemistry may elect chemistry (Physiological) 21 and 17c in Fall and Winter terms respectively and elect other subjects to complete the schedule.

JUNIOR YEAR

Fall Term	Credits
Bacteriology, antiseptics 4a	4
Pathology, infectious dis. 2a	4
Chemistry, biological 29a	4
*Zoology, general 7	4
	16
Winter Term	Credits
Bacteriology, Pathogenic 4f	4
Bacteriology, industrial hygiene 24	2
Chemistry, Biological 29c	4
*Zoology, heredity and eugenics 13	4
Spring Term	Credits
Bacteriology, immunity 4j	6
Pathology, Infectious dis. 2b	3
Pathology, meat inspection 3	3
	16
*Zoology, genetics 18	16

*This Zoology series is highly recommended but may be replaced by some other series or courses.

The student should work off the prerequisite to medical entomology 15 if he has not already done so in the Sophomore year.

SENIOR YEAR

Fall Term	Credits
Bacteriology, Public Health 4k	4
Entomology, medical 15	3
Elective and required work in State Laboratories and hospitals. (3)	10
	17
Winter Term	Credits
Elective (Math. statistics 8 or 4a)	
Elective and required work in State Laboratories and hospitals. (3)	17
	17
Spring Term	Credits
Bacteriology, digestive tube 4L	2
Elective and required work in State Laboratories and hospitals. (3)	15
	17

(3) The student will be required to take the lectures in child hygiene and public health nursing, Sanitary engineering, Epidemiology and vital statistics (total 4 credits); public health laboratory work in Bacteriology, pathology, serology and chemistry 12 credits; hospital practice (4 credits). (A credit involves 3 hours of effort).

Electives may be taken with a view to perfecting a technic in laboratory practice, to develop a better preparation for sanitary inspection work, or in a diverse field of technical education, science or liberal arts.

The program will be arranged so that the students will spend half the day in Lansing in the Laboratories of the Michigan Department of Health or in one of the several hospitals and Sanitoria and the other half at the college.

Post-Graduate work leading to the master's and the Doctor's degrees will be available to graduates in this course.

This is a progressive, timely, educational measure. One that will be instituted by other states and colleges. We take pride in being able to make announcement that Michigan is in the van guard. We also urge that our members recommend this course to prospective students and also announce it at hospital staff meetings.

MINUTES OF A SPECIAL MEETING OF THE COUNCIL

A special meeting of the Council of the Michigan State Medical Society was held in the Rowe Hotel on March 30, 1926, and was called to order by the Chairman, J. B. Jackson. The following Councilors were present:

Doctors Jackson, Charters, Van Leuven, Ricker, Randall, LeFevre, Powers, Corbus, Stone, Secretary-Editor F. C. Warnshuis, and President C. G. Darling.

On motion of Councilor Ricker, supported by Councilor Van Leuven, it was directed that the Medical Legal Committee's funds be transferred to the general fund of the Society and that disbursements therefrom be made by voucher signed by the Chairman of

the Committee, Chairman of the Council and the Secretary. Carried.

It was moved by Councilor Corbus, supported by Councilor Stone, that the Council felt that it was to the best interest of the Society and the Medical Legal Committee's activities that the names of no members of the Medical Legal Committee be lent to any insurance corporation in endorsement of their business or methods of handling claims.

It was moved by Councilor Powers, supported by Councilor LeFevre that the Council go on record of tendering a vote of confidence and appreciation to the Chairman of the Medical Legal Committee, Doctor F. B. Tibbals, for the splendid manner in which he has conducted the business and affairs of the Medical Legal Committee and that we hereby record an expression of appreciation for the time, thought and effort Dr. Tibbals has devoted to this work. Carried.

On motion of Councilor Stone, supported by Councilor Bandall, the Secretary was directed to extend to the American Medical Association a cordial invitation to hold its 1927 meeting in Detroit, and to endorse the invitation that was being extended by the Wayne County Medical Society. Carried.

There was no further business and the Council adjourned a 6:00 p. m.

MANUAL OF PHYSICAL EXAMINATIONS

If our members will turn to the report of the County Secretaries Conference contained in this issue he will find a discussion on Periodic Physical Examination. The public is demanding in increasing numbers physical examination. They are being induced to submit to these examinations by several agencies. The examination to be of value must be thorough and complete. Having been made the findings must be evaluated and suitable advice imparted. This is the examining doctor's responsibility.

To aid our members the Council has purchased a sufficient number of the "Manual on Physical Examination," prepared and published by the American Medical Association, for presentation to each member. They will be distributed by the Secretary of your County Society. Each County Society will devote one meeting to discuss Periodic Physical Examinations and it is purposed to pass out the manual at that meeting.

County Secretaries are requested to advise us of the date when such meeting is to be held and the manuals will be forwarded to him.

This plan of activity is one of the features of our years program. It is calculated to aid

each member to be abreast of the times. It is an educational movement that is nationwide. We therefore urge that you secure a copy of this manual and profit by reason of it.

EXPRESSION OF APPRECIATION

It has been our privilege to serve our Society for a goodly number of years. That service has been one in which the objective has ever been to aid our members and to advance the interests of our Society in its several activities. What was entailed in that service has been set forth from year to year in our annual reports to the Council.

There have been times when our service appeared mighty small. At other times the effort expended appeared to be unavailing. Discouragement, yes, at times we experienced it. However, we kept on and as we look back we perceive that our Society has progressed, not because of our efforts, but rather, because of the efforts expended by our Officers, Councilors and County Units, whom we have been privileged to aid. We are appreciative of having been permitted to have so served. If we have achieved we are content because of having contributed our mite to that of those who have labored.

During the January meeting of the Council we were called out of one of the sessions and kept out for a period of time. The reason therefore was never known to us until March 30th, when, during the Secretaries' Conference, a diamond ring was presented to us as a gift purchased by the individual contributions of the members of the Council and tendered by them as an expression of the Council's appreciation for the years of our service as Secretary-Editor. Coming as it did and from individual Councilors who best knew of our service, it was a surprise as well as a touching expression of confidence that deeply impressed us. One can only say, "thank you." However, a deeper, indescribable inner record has been implanted that will carry on within us through the years to come.

TRI-COUNTY MEDICAL SOCIETY EXCHANGE CLUB MEETING

I have been requested by the Secretary of the State Society, to give a report of a recent meeting our Society held with the local Cadillac Exchange Club. Our subject for a program was "Periodical Health Examinations." To start at the beginning, we had a noon-day luncheon at the Hotel McKinnon, in advance of course, at which time a detailed program was arranged, by each doctor taking some specific phase of the subject. This was followed later by a Sunday fore-

noon rehearsal, where suggestions and changes were made to fit the occasion, and also to avoid any over-lapping or repeating, when the program was given. Also the time for each one was to be around five minutes, and same was to be in the nature of an oration, not read from manuscript.

It was the opinion of all present that this should be followed by another rehearsal the evening before the noon-day luncheon, which was done and I think, was really the secret of the success of the effort.

Dr G. D. Miller being chairman of the Program Committee of the Exchange Club for that month, was thereby Chairman of our meeting and in this capacity made a few appropriate remarks in the opening and closing of our program. Your humble servant (Dr. Moore) then introduced the subject. Emphasizing the remarkable achievements of preventive medicine in the United States in the increase of duration of life which has been brought about chiefly through the control of infectious diseases in childhood and early adult life. Also through the medical and dental inspection of schools and the work of the school nurse and their co-operative lay organizations. All the above however, does not touch or influence the adult individual in his active or working period of life, nor does it prolong the same. Hence the human machine is wearing out at the same old rate. But the Periodical Health Examination by finding the pre-symptoms was the only weapon which has been developed to increase the life expectancy of the adult. Then I gave the history of the Periodical Health Examination. Closing with a eulogy on the mule, who never eats too much, or never drinks too much (even when warm and thirsty), quits when the whistle blows, and refuses to inbreed, thus leaving the club in good humor for the program to follow.

Dr. Smith opened the program proper with the blanks in the hands of each member, showing how necessary it was to answer any and all the questions and how one depended on the other and that when completed was really a picture of the individual.

Dr. Carrow followed with the relation of health to business. Emphasizing the yearly inventory and checking up the business man did in order to know where he stood in a business way. While as a matter of business it was more necessary to check up on himself.

Dr. Gruber then took up heart and kidneys as his part of the program and in a very plain but definite talk showed how insidious were their primary defects, but how simple to detect with the appliances we have at

hand and with so favorable results when taken in time.

Dr. Ricker next took up the Commercializing of the subject by Companies, Etc. Showing very clearly that the one to make the examination was the family doctor, the one who knew and had a personal interest in the individual.

Dr. Wardell, the Shakespeare of the Medical Society, and the youngest member (in spirit), was given the task to make up for what the rest of us failed in doing, and gave an eloquent oration on diet and posture and closed with a poem on "My Mule," that was a scream.

The program was put over on schedule, very snappy and with no repeating or overlapping. If we have suggested anything that will be of help to other Societies in bringing this most important subject before the people our efforts will not have been in vain.

Yours for the Profession,

S. C. Moore, Secretary,
Tri-County Med. Society.

Editorial Comments

Section officers are engaged in formulating the program for our Lansing meeting. Members desiring to read papers should write to Section Secretaries for place. Their names and addresses may be found under the list of officers in the front section of The Journal.

We have just returned from the Dallas Meeting of the A.M.A. as the Journal goes to press. It is impossible to impart in this issue, the outstanding features of that meeting. Extended comment will appear in our next issue. Dr. Jabez Jackson, of Kansas City, was elected President-Elect.

This issue contains the stenographer's notes of the County Secretaries Conference. We urge every member to read this report. It is especially urged that you give thought to the addresses of President Darling and Chairman Jackson. There is much for thought, yes and action too, in these observations. A discussion at your next county meeting would not be amiss.

Mencken, modern wielder of a pen that is replete with truism, in the course of an editorial, makes the following comment:

"Thus one observes, in all fields, a series of attempts at evasion—or, perhaps, more accurately, of simplification. The moron, unable to comprehend what is set before him, seeks surcease from the struggle that is easier. Biology is inordinately complicated and confusing; Genesis is beautifully simple and plain; ergo, Genesis is true and biology comes from hell. Again, modern pathology is complex and full of snares—and chiropractic is so clear and neat that even an ice wagon driver can take it in; ergo, it is superior to the science of Virchow, and the ice wagon driver is superior as a scientist."

Can we educate these morons?

We presume you received your spring supply of "blowers" all monogrammed in the form of hand-

kerchiefs mailed to you from an eastern business(?) house. You also noted the letter asking for \$1.00 for the six and stamps to return if not wanted. If you remitted the dollar you paid a big price for cheap material as well as confirming that you are an easy mark. We kept our, stamps and all (in storage). Now we are awaiting to see how they are going to collect. The plan of salesmanship is first an imposition and second it entails cheap material for what appears to be bargain prices but which are not bargains. We've got a supply of neckties that are "in storage" also. We wish some similar firm would start sending autos under the same plan. What your experience has been with these mail outfits is desired.

The State Department of Health has issued a laboratory manual. It was written by the Director of the State Laboratories, C. C. Young, M. D., and composes a part of the university requirement for the Degree of Doctor of Public Health. The dissertation is a five year report on the department laboratories. It is descriptive of the technical and administrative procedures. As such it at once becomes a valued manual and aid to all laboratory workers, hospitals and medical men. It imparts details in clear terms and demonstrates basic reasons as to why our state laboratory is so efficient, scientific and dependable. We congratulate the director on this excellent presentation and recommend that those engaged in similar work avail themselves of this opportunity of obtaining information, instruction and assistance that will be of value to them.

Our relationship with the public entails a dual role—that of education as to what scientific medicine can positively achieve and the personal service we render. Our profession has progressed with extreme rapidity during the past twenty years—so rapidly that we have far outdistanced the public which has but meager knowledge of our positively proven facts. The people as a whole are unaware of these facts. Did they but know, and know understandingly, the service that awaits them from reputable doctors would extend life twenty to thirty years. It is regrettable that by reason of the propaganda of cultists and so-called Christian Scientists, lives are daily sacrificed, cripples made, and pain and suffering fostered—many, if not all of which might be eliminated if the representation of these benighted and misguided proponents were fully exposed by the truths and facts of scientific medicine. They pursue their nefarious ways and falsely prey upon the ignorance and gullibility of human beings, gathering in the shekels under a guise of pseudo science. Because of which, our duty to our fellowman is one of enlightenment and education.

The inordinate waste of money for flowers for the sick room is an extravagance to which hospitals may well give consideration. We are not opposed to the adornment of a sick room with flowers and we recognize the cheer they convey. Our contention is rather the abuse of the practice. Recently one patient received over a hundred dollars worth of flowers in one day. Every hospital man has witnessed time and again five to twenty dollars worth of flowers at the bedside of a ward patient who is being cared for on a free bed. Patients paying their hospital expenses with difficulty frequently receive fifteen to thirty dollars worth of flowers during their hospital residence. "Say it with flowers" is the florist's sales slogan, but how much better it would be for the average patient if a penned note of cheer and good wishes were sent to these patients and then enclose the money that

would have been spent for flowers to aid them substantially as they so often stand in need of assistance. Despite the cry of the florists, hospitals might well provide sufficient flowers and prohibit sending of others—some such restriction is called for.

The chiropractors have a "College" Its members have the distinguished right to attach the four mystic letters—capitals all—F.A.C.C. to their names. Won't it look fine?—B. B. Manipulator, D.C., F.A.C.C.

The item from a New Haven paper which carries the news states that the latest "college" is "chartered under an act of the congress and is analagous to the Royal College of Surgeons of England and the American College of Surgeons in this country." It does not say what congress enacted the act referred to, but it does state that "of 35,000 chiropractors, fellowships are limited to 2,000 membership on two continents." When one fairly untangles that statement he arrives at the conclusion that this newest born "college" means to be somewhat exclusive. A pronouncement is made in the newspaper statement as follows: "The degree (!) of F.A.C.C. is the highest honor and most coveted degree (!) in the chiropractic profession and demands a training and competency far beyond that required of the ordinary organization. This fellowship carries with it a well defined code of ethics and each fellow inspires the other to abide by this code." (The exclamation points and the italics are ours.) The chances are that that "code of ethics" is going to be "carried" a far distance into strange places.

We will now await, with calm confidence, announcements of a "college" of naturopaths, a "college" of mechanotherapists, a "college" of naprapaths, and a "college" of chiropodists. And when it comes to deciding on the winner from the standpoint of euphony, we will vote for the last named.

Fellow American College of Chiropody!!!—Bulletin A. M. A.

The professional man conducts the most hazardous business of all. He is never "safe." He is at all times wide open to attack by that "bandit" or "highjacker"—the so-called "blackmailer"—who preys upon the professional man through that unpopular individual, the "needy attorney." That this condition exists—that it is vicious—that it is far reaching in its effects—that it is growing worse, cannot be successfully disputed. There are, of course, several contributing factors. However, the most outstanding cause, as being the most dangerous and effective, is furnished from within the profession itself. We refer to that professional man—and there are unfortunately too many such—who deliberately, or otherwise, practices the tearing down of a fellow practitioner's reputation by discrediting his ability, with the sole purpose in mind of thus advertising his own particular superior qualifications.

Through this method of "self-advertising" is planted in the mind of a patient, who never before had a thought occur in that direction, the germ of an idea to "get some easy money" which leads him to the aforesaid "needy attorney" and—the mischief is done—the claim or suit follows and the usual undesirable notoriety following newspaper publicity results. This in turn educates the public to the detriment of the profession at large. Thus becomes the "self-advertising" professional man—as "accessory before the fact"—one of the primary causes of the great increase in so-called "black-mail" malpractice claims and suits. This condition not only breeds malpractice cases but—is also responsible in creating claims and suits al-

leging damages sustained by reason of slander, undue familiarity, assault, breach of contract, creating drug addicts, return of fees, etc.—all of which come under the category of professional liability.

Among Our Letters

NOTE.—This department is the open forum of our members. Your communications and discussions are welcomed. Anonymous communications cannot be accepted, though at times names may be omitted by the Editor. Personalities will not be printed and responsibility for opinions is not assumed. We invite your interest in this department. Address: The Editor, Journal, Michigan State Medical Society, Powers Theatre Bldg., Grand Rapids, Mich.

Editor of The Journal:

An united effort is being made to furnish for the County Medical Societies, talks on prenatal care and maternal welfare under the auspices of a Joint Committee, organized for this purpose with a State Chairman and a corps of speakers of ability in each state.

The Chairman for Michigan is Dr. George Van Amber Brown, 13300 Woodward Ave., Detroit, Mich., who will appreciate your co-operation in announcing the work so that when requests come from the County Secretaries, he can arrange to furnish the program. It is hoped to have two such meetings a year in each County Society.

Thanking you in advance for your interest in the educational program.

Very cordially yours,
Geo. Clark Mosher.

Editor of The Journal:

Upon reconsideration of the matter of an invitation to the American Medical Association from the Wayne County Medical Society, it was decided to extend the invitation for 1928 instead of 1927.

We sincerely appreciate your services in the matter thus far and trust that we shall have your co-operation in 1928.

Fraternally,
H. A. Luce, M. D., President.

Editor of The Journal:

I am just home from an extended European trip and find yours of November 2nd which must have reached my office about ten days after I left home last October. This explains my long delay in answering it.

It was certainly very kind of you to write me.

Our doctors take great pleasure in doing all they can to promote scientific medical progress and I assure you we are ready to co-operate with you and others who are devoted to promoting scientific medicine in every way possible.

I will place your letter before our Board.

I remain, dear doctor

Sincerely yours,
John Harvey Kellogg.

State News Notes

Dr. Eugene S. Browning, urologist, sails for Europe Saturday, April 24, for four months post-graduate study in London, Paris and Vienna.

OUR SOCIETY BUSINESS AND ACTIVITIES

HARVEY GEORGE SMITH

EXECUTIVE SECRETARY

NOTE: This Department will each month contain a discussion and report of our Society work and planned activities. Your interest and correspondence as to your problems is solicited.

POST-GRADUATE CONFERENCES

Plans are under way for conducting three Post-Graduate Conferences during the month of May and early June. The first conference, for the 13th District, will be at Alpena, on May 6th, the second for the 11th District, at Fremont, which will include doctors from Muskegon on the west to Big Rapids and beyond on the east and as far north as Manistee. At least seventy-five are expected to attend this day of study. The third conference will be at Jackson, the city located in the center of the fourth District, which includes Ingham, Hillsdale and Jackson counties. Not less than one hundred doctors will be in attendance when this Conference convenes on May 25th.

Due to bad roads and weather conditions in addition to much sickness and a near epidemic of old-fashioned flu, Conferences have been delayed. The belief has been held that it would be unfair to sick people to urge doctors to attend meetings and leave suffering patients until such time as the doctors could return from Conferences and again it is unfair to request doctors to attend special conferences for an entire day when cases of pneumonia, and flu demand their best efforts. To come to a Conference feeling it a duty to be back in the community where patients are calling for assistance produces an unsatisfactory attitude and atmosphere in which to advance Scientific Medicine. Both the patient and the doctor would suffer under such circumstances and neither would receive the benefits of Scientific Medicine.

Now that road conditions are improving, less illness of acute nature is developing, the members of County Medical Societies should be planning their time and intent so that conferences that are specially planned for their respective County Medical Societies and their District may be attended.

The State Medical Society, the Councilor and the Chairman of the Post-Graduate Conferences are attempting to bring to each Conference speakers who will give the last word in proven facts in Scientific Medicine and at the same time bring useful, practical information for every practitioner. Speakers are giving from one to two days, travel-

ing across the state in order to meet with their fellowmen in the interest of only one thing and that is to help advance Scientific Medicine throughout the state, to assist their fellow practitioners. They desire to serve. They can be assured that they are serving well by being met by doctors who also are giving time and have the desire to advance Scientific Medicine. Such an assurance can be measured in but one manner—attendance. When the Conference for your District is announced Doctor ———, lend a hand. Be there!

PHYSICAL EXAMINATIONS

The advance guard of the County Medical Societies of the State, determined by definite interest and activity in physical examinations, is composed of the following Societies:

The St. Clair County Medical Society, Washtenaw County Medical Society, Alpena County Medical Society, Lenawee County Medical Society, Muskegon County Medical Society, Jackson County Medical Society, Houghton County Medical Society, Tri-County Medical Society.

These Societies have already arranged for or conducted a special program on physical examinations. The Secretaries have written for and secured from the State Office the Manual on Physical Examinations, printed by the American Medical Association, and distributed to the membership of the State Society through the County Society at no extra cost. The membership of the organizations are making appointments with their fellow practitioners for a complete physical examination. As a group they are placing scientific medicine at the command of the apparently well.

The Tri County Medical Society has taken a unique step in giving information to laymen. With the Exchange Club an entire program was planned on scientific periodic physical examinations. The Medical Society organized a team of five members, each was assigned his part and then after holding several rehearsals the program was presented. The test of the plan is a statement like this: "Our own doctors gave us one of

the most interesting programs of the whole year."

At Tecumseh the Secretary of the Lenawee County Medical Society dropped in to see the President of the Association of Commerce—"Wouldn't you like to have the County Medical Society secure a speaker for one of your banquets?" said he, "You couldn't make a better proposition, we need a speaker for April 27 and you have the job," was the reply. The Secretary hardly believed what had happened as he walked out of the office, but reflecting he concluded, business men are interested in scientific medicine. They must want maximum health. A speaker has been secured who will present to the business men and their sons a discussion on "Scientific Medicine and Its Intelligent Use for Health."

County Medical Societies and members in furthering a program of physical examinations for themselves and for the apparently well are taking the most advance step in Scientific Medicine. They stand at the cross-ways of physical life of the human family, and may direct the members to more health attainment, more joy and happiness, more accomplishment in personal, community, state and national affairs. They may turn on the red or green light and give intelligent understanding and direction to all, or they may stand by and let the human family pass, some well filled with the vigor of youth, some young but plodding, some wrecked at middle age, some hoping for life through pseudo health givers, and some hoping under the fallacies and superstitions of past ages.

Deaths

Dr. Norman S. Campbell, Bark River, Michigan, died at St. Francis Hospital, Escanaba, Michigan, February 23, 1926, from septicemia, following burns sustained December 26, 1925, when his home was destroyed by fire during the night. The family barely escaped from the burning building. Dr. Campbell was born July 11, 1879, in Thoreburg, Ont. After graduating from high school in Ontario at the age of sixteen, he attended Toronto University for three years, his fourth year, in the Detroit College of Medicine and Surgery. He served one year in Children's Hospital as Intern, practiced one year at Milbrook, Michigan; eighteen years at Germfask, Michigan, and came to Bark River, Michigan, in 1922.

At the time of his death, he was President of the Delta County Medical Society.

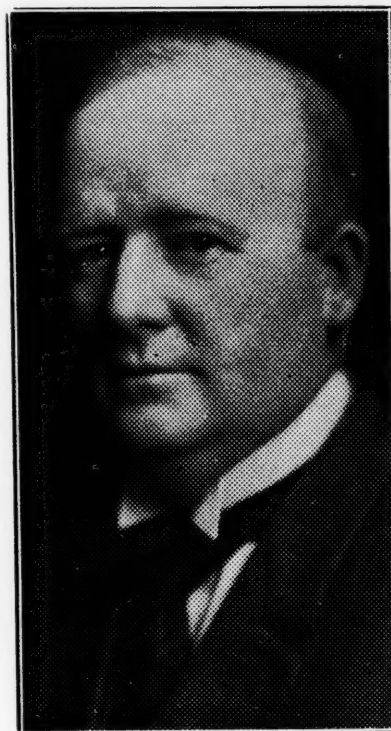
Dr. Robert Bennie died at his home in Sault Ste. Marie, March 20, 1926, aged 64. Dr. Bennie was a graduate of McGill University, 1891, and for many years was one of the leading physicians in this part of the state. He served both as President and Secretary of the Chippewa County Society on dif-

ferent occasions, and was once President of the Upper Peninsula Medical Society.

Dr. Bennie was very active in his profession and was keenly interested in everything for its betterment.

In his death both the County and State Societies have lost one of their most prominent and valuable members.

Berten M. Davey of Lansing, died on April 10, after an illness of six days, from lobar pneumonia. Dr. Davey was a graduate of the Detroit College of Medicine in 1905, chief of staff of the St. Lawrence Hospital, Fellow of the College of Surgeons, member



BERTON M. DAVEY

of the staff of Sparrow Hospital and grand knight of the Knights of Columbus.

In his passing the community of Lansing loses an esteemed citizen and professional man. Our State Society sustains a serious loss for Dr. Davey was ever active in our interests. By reason of his acquaintances he was active in medical legislation and as chairman of our Legislative Committee his work in the legislature was influential.

County Society News

ST. CLAIR COUNTY

The regular meeting of the St. Clair County Medical Society was held at the Hotel Harrington, Port Huron, Michigan, April 1, 1926. Meeting was called to order at 7:40 p. m., Dr. R. K. Wheeler acting as chairman in absence of both the president and vice-president. Seventeen members were in attendance. Shortly after the meeting began the vice-president, Dr. W. W. Ryerson, assumed the chair. The minutes of the meetings of March 4 and 18 were read and approved. The auditing committee made their report for the two previous years and the report with

recommendations was adopted. Financial statement of the Secretary-Treasurer as of March 31, 1926, was read and placed on file.

Dr. A. L. Callery addressed the Society on the subject of a clinic for crippled children, soon to be held under the auspices of the Rotary Club of Port Huron, and made a plea for co-operation on the part of the Society to the end that the parents of the children be re-assured. He then moved, seconded by Dr. Douglas Treadgold, that the Society publicly endorse the crippled children's clinic and that as many members as could do so attend the same. The motion was carried and the Secretary instructed to write the Rotary Club informing them of the action taken.

The Secretary-Treasurer made a report to the Society relative to the Secretaries Conference held at Grand Rapids on March 30, 1926. A rising vote of thanks was given the Secretary-Treasurer by the Society upon completion of his report and same was adopted.

The Secretary-Treasurer was instructed to obtain a sufficient number of manuals of physical examination of the apparently healthy to allow each member of the Society to have one.

Dr. A. J. MacKenzie read a very interesting and original paper upon "Infections of the Gall Bladder." The subject was discussed by Doctors B. E. Brush, McColl, Waters and Haight. Dr. MacKenzie closed his talk in the usual manner. Meeting adjourned at 10:12 p. m.

Regular meeting of the St. Clair County Medical Society was held at the Hotel Harrington, Port Huron, Michigan, April 15, 1926. The meeting was called. There were twenty-three members in attendance. The usual order of business was dispensed with and the speaker of the evening, Dr. William H. Marshall of Flint, was introduced by the President.

The address of Dr. Marshall was practical and thoroughly enjoyed by the members present. It is impossible in this report to do justice to Dr. Marshall. The subject was "Periodic Physical Examinations of the Apparently Healthy," and was intended to introduce and supplement the manual, on the subject, prepared by the American Medical Association. The speaker covered the subject in a practical manner and following will be found a few of the more important facts and factors so well brought out by Dr. Marshall.

The speaker was of the opinion that the ordinary physician could do this work just as well and perhaps better than clinical groups. In fact, the physician making the entire examination had an advantage over the clinical group, unless the data obtained by such group was correlated by one individual, the composite picture presented by the subject would be lost. In his own practice, the speaker said, he made all periodic examinations by appointment and did not allow them to interfere with his office work in caring for the sick. He would ask them, at their first call, to fill out History Form A as completely as they could and later present themselves for examination by appointment. Dr. Marshall seemed of the opinion that if the examination was taken up in a systematic way, that the required time would not be excessive. In his own practice he found a great deal of information could be adduced in a comparatively short time. The speaker emphasized certain dangers in making the periodic examination. "Members of the profession intending to do these examinations should study physiology and hygiene, should study the neurophysiology of both heart and kidneys and, if possible, forget pathology, remembering that they are now dealing

with living bodies, not dead ones. Another factor of danger toward the whole movement is careless examinations and conclusions; these will act as a boomerang, throwing the entire plan of periodic examinations into disrepute with the public. Then there is always a danger of turning up certain cases where an exact diagnosis within a short time is impossible. Even in clinical groups and at large hospitals these cases occur and are apt to cause some embarrassment. Another danger is a misunderstanding, on the part of the examiner, of certain facts contained in the history given by the patient, the danger of placing too much importance upon one fact and not sufficient upon another, as well as the danger of exaggeration of certain symptoms by the patient. Then, again, there is the danger of the examiner 'seeing too much,' of exaggerating things he does find, of placing too much importance upon minor defects or conditions, in other words, a 'myopic vision' is to be avoided by the examiner. Another and most important danger is that of making the patient neurotic. Many anxiety neuroses are caused in this manner. The physician must guard against the implantation of fear in his patient."

In his discussion of Physical Examination Form B in the manual, Dr. Marshall placed some emphasis upon rectal examinations. These should always be made. Many facts are brought to light by a careful rectal palpation. The whole question of blood pressure, either high or low, should be treated in a liberal manner. Little is positively known about hypertension and the significance of moderate hypertension is not fully evaluated in all cases in a correct manner. Only sustained hypertension, treating the subject as if a basal metabolism test was about to be made, should be given serious consideration. High diastolic pressure is more significant than high systolic pressure, according to Dr. Marshall.

Congenital visceroptosis should not give rise to a serious prognosis. Oftimes individuals in apparent robust health show, upon examination, malposition of the colon or gastroptosis. We are apt to think, said the speaker, of the colon as it is often pictured in textbooks and charts, as lying evenly, an inverted U. Subjects with the colon in the form of an M have perfect function. Abdominal supports do not correct congenital types of visceroptosis. Movable kidney, as a rule, should not cause serious apprehension. In every routine physical examination certain reflexes such as biceps, triceps, pupillary, Romberg and patellar, should always be tested. Sensation can be tested easily by a little cotton upon a toothpick. A urinalysis should invariably be done and if needed, or indicated by the chemical findings, a microscopic examination of sediment may be made. A Wassermann should be taken. The speaker scored heavily the practice on the part of many physicians who treat late syphilis without clinical manifestations by arsphenamine medication. This is a dangerous procedure, according to Dr. Marshall. In some cases death may occur where there is cardiovascular pathology present in this type of case. Certainly active clinical syphilis calls for treatment, but unless this is true, we should proceed with caution. Finally there should be a summary of findings and the conditions found grouped together to make a complete picture. Evaluation of symptoms is very important. Some are to be taken seriously and others treated lightly in forming a conclusion in a given case. It is not the lack of knowledge on the part of a physician which causes him to overlook abnormal conditions, it is often only due to the fact that the examiner has failed to examine. Dr. Marshall emphasized light, good strong light as being a most important physical requisite in making an examination.

Following Dr. Marshall's paper, discussion by the following members of the Society took place: Doctors Reynolds, Burley, Smith, Bowden, Waters, Callery,

Heavenrich, and Moffett. Dr. Marshall closed in the usual manner.

A motion was made, seconded and carried that each member of the Society be given a physical examination before the next meeting and that a report of the same be made at that meeting. The Society adjourned at 9:10 p. m.

G. M. Kesi, Secy.-Treas.

GENESEE COUNTY

I am enclosing a list of the scientific meetings held by our Society from November 25th, 1925, up to the present time, for publication in the May issue of The Journal.

Genesee County Medical Society met for noon luncheon at Hotel Dresden, November 25th, 1925. Dr. P. Morse, Pathologist, Harper Hospital, Detroit, Mich., spoke on "Spenomegaly."

Genesee County Medical Society met for noon luncheon at Hotel Dresden, January 6th, 1926. Dr. Clinton, Harper Hospital, Detroit, Mich., spoke on "Enterostomy and Its Indications."

Genesee County Medical Society met for noon luncheon at Hotel Dresden, January 20th, 1926. Dr. Green, Owosso, Mich., spoke on "Hypothyroidism."

Genesee County Medical Society met for noon luncheon at Hotel Dresden, February 3rd, 1926. Dr. Ward Seeley, Receiving Hospital, Detroit, Mich., spoke on "Vomiting of Pregnancy."

Genesee County Medical Society met for noon luncheon at Hotel Dresden, February 17th, 1926. Dr. N. Mortensen, Battle Creek Sanatorium, Battle Creek, Mich., spoke on "Primary Anemias."

Genesee County Medical Society met for noon luncheon at Hotel Dresden, March 3rd, 1926. Dr. Allen, Surgical Staff, Harper Hospital, Detroit, Mich., spoke on "Thoracic Surgery."

Genesee County Medical Society met for noon luncheon at Hotel Dresden, March 17th, 1926. Dr. Plass, Obstetrician, Ford Hospital, Detroit, Mich., spoke on "Simplified Obstetrics."

Genesee County Medical Society met for noon luncheon at Hotel Dresden, March 31st, 1926. Dr. Edward C. Davidson, Department of Surgery, Ford Hospital, Detroit, Mich., spoke on "The Treatment of Burns."

The Tri-City (Bay City, Saginaw and Flint) Medical meeting held at Bancroft Hotel, Saginaw, Mich., 7:00 p. m., April 7th, 1926, with about one hundred physicians in attendance. Dr. Channing Barrett, Professor of Gynecology, University of Illinois Medical Department, spoke on "Treatment of Prolapsed Pelvic Organs," with special reference of history of operation of "perineorrhaphy."

Genesee County Medical Society met for noon luncheon at Hotel Dresden, April 14th, 1926. Dr. E. Russell, Department of Pediatrics, Battle Creek Sanatorium, Battle Creek, Mich., spoke on "The

Effect of Ultra-Violet Light on Undernourished Infants and Children."

WAYNE COUNTY

On March 23rd Dr. Phillip H. Kreuscher, of Chicago, delivered a most instructive talk on "Back-ache" before a large number of the Society members.

March 30th marked a departure from the customary scientific program with a card and dancing party for the members and their ladies given under the auspices of the Entertainment Committee.

The following week Dr. Martin H. Fischer, of Fischer's Solution fame spoke on "The Constitution of Living Matter and Its Relation to Some Medical Problems" in a most illuminating and convincing manner.

At this meeting a resolution was adopted authorizing the Board of Trustees of the Society to begin negotiations for the purchase of a new club house.

The meeting of April 13th, held under the auspices of the Medical Section, was divided into two parts, the first being "A Brief Story of Disease" by Dr. J. H. Dempster and the second, "Evolution of Anatomy" by Dr. Wm. J. Stapleton, Jr.

This meeting was also the occasion for the presentation of a portrait of Laennec to the Society by Dr. Stapleton.

The last meeting of the Detroit Tuberculosis Research Society was held jointly with the Industrial Surgeons of the city on April 14th. A discussion of the problem of the rehabilitation and replacing at work of apparently arrested cases of tuberculosis was taken up.

The Detroit branch of the American Urological Society held its last meeting April 1st at the Detroit Athletic Club. The scientific program was rendered by Dr. Alvin Thompson of Flint, Mich. on "Recent Advances in the Treatment of Gonorrheal Rheumatism" and by Dr. W. R. Chynoweth of Battle Creek, Mich., on the "Relationship of Gastro-Intestinal to Renal Infections."

Dr. Robert L. Schaefer addressed the East Side Physicians Association on "Endocrinology" at the last meeting of that organization April 1st.

Dr. C. W. Waggoner, of Toledo, Ohio, spoke on "Activities Encroaching Upon the Private Practices of Physicians," at the last regular monthly meeting of the Highland Park Physicians Club, held April 1st.

KENT COUNTY

A RESOLUTION PASSED BY THE KENT COUNTY MEDICAL SOCIETY AT ITS REGULAR MEETING APRIL 14, 1926

WHEREAS, The Kent County Medical Society whole-heartedly accepts the principle that its members are ready and willing to serve freely and without compensation in all Free Clinics which restrict their services to patients worthy of free medical attendance, and

WHEREAS, This Society is directly opposed to the policy of Free Clinics adopting a graduated fee system for patients who are able to pay, and to the engagement of physicians' clinical services at nominal sums, and

WHEREAS, This society has been requested to make an immediate ruling upon the acceptance of

appointments to the medical staffs of Free Clinics adopting such policies,

BE IT FURTHER RESOLVED, That this Society requests its members to at once sever their connection with any Free Clinic which routinely and persistently renders free medical attendance to persons financially able to pay.

FURTHER, That members of this Society decline to accept appointments to the medical staff of any Free Clinic adopting the policy of a graduated fee system for patients and employment of physicians' services for a nominal sum.

FURTHER, That this Society, through its Permanent Committee for Investigating Free Clinics, continue to confer with the Welfare Union until a complete understanding be reached on the subject involving the acceptance of these principles.

FURTHER, That the Permanent Committee for Investigating Free Clinics be empowered to investigate and determine from which clinics the members of the Kent County Medical Society shall sever their connections.

FURTHER, That failure of any member to comply with this resolution shall be sufficient cause for this Society to prefer charges against that member in accordance with Section 10 of the By-Laws dealing with "Misconduct."

AND FURTHER, That a copy of this Resolution be sent to each member of the Kent County Medical Society.

ALPENA COUNTY

The regular meeting of the Alpena County Medical Society was held March 18th at the Louise Hood Tea Rooms on Chisholm street. The following physicians responded to roll call: Doctors Bell, Cameron, Foley, Burkholder, O'Donnell, McDaniels, Bertram, Secrist and Williams.

After a splendid dinner as the guests of Doctors Leo Secrist and William Arscott, of Rogers, the scientific program was carried out. Dr. Harry J. Burkholder presented two cases of polycythemia which had been carefully worked up. These cases had a red cell count of 8,000,000 and 9,500,000 respectively and a haemoglobin of plus 1.35. The literature was reviewed of some hundred cases that had been reported. Phenolphthalein was being exhibited in these two cases. Weekly blood counts had shown a reduction of some 2,000,000 red blood cells.

Dr. E. L. Foley gave an interesting paper on the needed improvements in the local hospital. He also presented a method for obtaining these improvements. A vigorous discussion of ways and means was entered into by all.

An invitation was received from the local clergy to be their guests at dinner at the next regular meeting of the Medical Society. This invitation was reciprocating from a recent entertainment and dinner tendered the clergy by the Medical Society. Program for the April meeting will be a paper by Dr. William Newton on "The History of the Specialty of Ophthalmology" and a paper by Dr. C. M. Williams on "Light Therapy."

C. M. Williams, Secretary.

IONIA-MONTCALM COUNTY

The March meeting was held at Hotel Belding, Thursday evening, March 11th.

Dinner was served at 7 o'clock.

The minutes of the two previous meetings were read and approved.

Communications of Dr. Nelson, Howard City, was read.

Dr. A. B. Smith, Grand Rapids, gave a very practical paper on "Malposition of the Uterus." He demonstrated that as good or better results could be obtained by local medical treatment than by surgery in many of these cases.

Dr. B. R. Corbus, Grand Rapids, gave a very interesting talk on "Hypertonus and Arteriosclerosis." His talk proved that while there is no cure for this condition, yet much may be done for the patient by advice and guidance.

Both papers were well received and freely discussed.

A motion was made by Dr. G. A. Stanton that a copy of Dr. Smith's paper be sent to The Journal of the Michigan Medical Society for publication.

H. M. Maynard, Secretary.

LENAWEE COUNTY

The regular monthly meeting of the Lenawee County Medical Society was held at the residence of Dr. C. H. Westgate at Morenci, on Thursday, March 25, 1926.

The meeting was called to order by the President and after old and new business was disposed of the members present listened to a very instructive talk by Dr. Howard H. Cummings, of Ann Arbor, on "Some Complications of Obstetrics." His talk in outline included the following topics: "Occiput Posterior Positions, Diagnosis and Treatment," "Indications for Caesarean Section," "Eclampsia," "Hyperemesis Gravidarum" and "Postpartum Hemorrhage."

Dr. Cummings emphasized the importance of giving the patient rest and watchful waiting in the posterior positions.

After completing his talk Dr. Cummings answered and discussed numerous questions advanced by his listeners. All members present agreed that this meeting had been the most practical of any held in some time, and we wish to thank Dr. Cummings through the medium of The Journal for coming so many miles to give us his message.

After adjournment an excellent musical program was given by Mr. and Mrs. Even Breyen and Miss Lea Bess Chappell, followed by a plate supper served by Mrs. Westgate.

The next meeting will be held April 22, 1926, at the residence of Dr. W. S. McKenzie, in Adrian.

R. G. B. Marsh, Secretary.

CALHOUN COUNTY

The Calhoun County Medical Society held its regular monthly meeting, Tuesday, April 6th at 8 p. m. at the Post Tavern, following dinner in the Rose Room.

After reading of the minutes and approval of the bills, the Secretary gave a lengthy report of the Conference of County Secretaries, which was held at Grand Rapids, March 30th. Following the report a motion was carried that the president appoint a committee to arrange for the holding of public health lectures, etc., and the appointment of a scientific team.

The County was particularly fortunate in having Dr. Robert Prebble, of Chicago, give a practical talk on "Pneumococcus Pneumonia." His many years of experience and unusual ability as a teacher gave much that was of value to the local profession.

Attendance at the dinner, 22; at the meeting 60.

Dr. L. E. Verity, Secretary.

HOUGHTON COUNTY

The Houghton County Medical Society held its regular monthly medical meeting Tuesday, April 6th, at the Miscowauvik Club, Calumet, Michigan. After the reading of the minutes and allowing of bills, the matter of the minimum program was taken up. It was moved by Dr. Bourland, seconded by Dr. Kirton, that it would not be feasible for the Houghton County Medical Society to adopt the minimum program.

The letter from the State Medical Society relative to the matter of a special meeting for physical examinations of the apparently healthy was read. It was moved that the Secretary request manuals of the American Medical Association on physical examinations from the State Secretary for every member, and that a meeting be arranged for this program.

The matter of running a series of advertisements in the local papers was reconsidered and on motion of Dr. Ellis seconded by Dr. Manthei, it was recommended that the matter be dropped.

It was moved that the Secretary write the Marquette-Alger County Medical Society a letter of sympathy at the loss of its Secretary, Dr. H. J. Hornbogan.

The following committee was appointed to draw up resolutions over the unexpected death of Dr. H. N. T. Nichols: Doctors Bourland, Rupprecht and Kirton. Dr. Gregg was appointed to secure flowers for the Society.

The first paper was read by Dr. F. E. Coster on "Scarlet Fever." Dr. Coster took up the serum-therapy in full. He gave a very interesting and concise description of the technic and results obtained. The paper was fully discussed by Doctors Bourland, Abrams, Manthei and Gregg.

Dr. Bourland next read a paper on the "Clinical Value of the Electro-Cardiograph." Dr. Bourland gave a very interesting description of the electro-cardiograph and the technic and use of same, and presented a chart of the different records and explanation of same. This paper was fully discussed by those present.

The Society then adjourned to lunch.

G. C. Stewart, Secretary.

INGHAM COUNTY

Ingham County activities for January, February and March:

January 8th—Dr. M. A. Mortensen, of Battle Creek, talked on "Arterial Hypertension and Some of Its Complications." Attendance 40.

February 12th—Dr. Philip Kreuscher, of Chicago, gave an illustrated talk on "Backache." Attendance 60.

February 19th—We had a social meeting at which Dr. W. E. McNamara gave a well illustrated talk on "Big Game Hunting in Michigan and in

the Canadian Rockies." The program was followed by a buffet luncheon of reindeer sandwiches and coffee. Attendance 100.

March 12th—Dr. Norman Allen, of Detroit, read a paper on "Diverticulitis." Attendance 45.

March 23rd—This was a luncheon at the Hotel Downey for the purpose of stimulating good fellowship among the members and getting into the spirit for entertaining the State Meeting in September. Mr. J. W. Haarar, a prominent Lansing banker, gave us a talk on "Doctor's Investments." Tardy members were fined or requested to sing a solo. Some sang. Some paid. We collected enough on fines to pay for the speaker's luncheon.

Thus far we have had a very successful year and we are already planning things for the State Meeting to be held in Lansing in September.

C. F. DeVries, Secretary.

OAKLAND COUNTY

Following the outline of the Minimum Program which has been adopted by the Oakland County Medical Society, a special program on public health education and information was planned for the March meeting.

Dr. Nathan Sinai, the speaker from the Extension Department of the University, stated that a program of educational nature, in which the organization should take the public into its confidence is the new and effective idea of modern practice.

"Public health educational work should have started 50 years ago," Dr. Sinai told his medical friends. "Medics were rather backward about going ahead with publicity and educational work of this nature, but recent years have brought marked changes. The change has been brought about by the anti-scientists. If the adult mind can be educated in wrong thinking, it can also be educated in right thinking."

Praise was extended the newspapers for their interest in scientific discoveries, the use of health columns, and other constructive publicity. Dr. Sinai mentioned the value of radio in educational work of this nature.

"The public will and does believe what it hears, if it comes from persons in authority."

Definite steps were taken by the Society to put into operation a plan of health education. The Secretary was directed with the Health Committee to secure speakers from the membership to assist the Extension Department of the University and to conduct a health instruction program in co-operation with the city and rural schools of Oakland County.

Frank F. Bachelder, Secretary.

EATON COUNTY

I am writing to report on our March monthly meeting. The meeting was held March 25th, at Charlotte. The weather and roads being very bad, there were only nine from the Society present. We regretted this very much as Dr. Earle C. Smith, of Grand Rapids, was present to speak and we felt that he was entitled to a much better audience.

As a preliminary to Dr. Smith's talk Dr. H. J. Prall presented a paper on "Labor Following Hysterotomy." Following this Dr. Smith gave his lantern slide talk on "Common Skin Diseases, Di-

agnosis and Treatment." He showed some 200 slides and presented the subject in a most delightful manner. The Society appreciates very much Dr. Smith's efforts in bringing this treat to us.

There was no business session held at this meeting.

The paper read by Dr. H. J. Prall is presented to the Editor of the State Journal for their consideration.

Enclosed also is the check for seven members dues whose names are listed on separate sheet.

H. J. Prall, Secretary.

MECOSTA COUNTY

The list of officers of the Mecosta County Medical Society remains the same as those of the past year, which is as follows: President, Dr. G. H. Yeo; Vice President, Dr. B. L. Franklin; 2nd Vice President, Dr. M. L. Teeple; Delegate, Dr. L. E. Kelsey; Alternate, Dr. J. L. Burkhart; Medico-Legal Advisor, Dr. G. H. Lynch; Program Committee, Dr. J. B. Campbell, Dr. G. H. Yeo, Dr. Glenn Grieve.

At our last meeting, it was the desire of the Mecosta County Medical Society to have a district conference held at Big Rapids sometime during the year of 1926. Possibly that should include the Montcalm-Isabella-Clare Society. That part of the arrangement, however, we would be perfectly willing to leave with you or Mr. Smith. Would you kindly advise me if such arrangement could be made possible—to hold one of the district meetings here?

I am sorry to have delayed sending this list of members of the Mecosta County Medical Society, but I assure you it was unavoidable.

D. MacIntyre, Secretary.

NEWAYGO COUNTY

The Annual Meeting of the Newaygo County Medical Society was held at noon, February 20, 1926 at Kimbark Inn, Fremont, Michigan. Minutes of the previous meeting were read and approved. Motion made by Dr. Waters and seconded by Dr. W. Geerling that the minimum program, as recommended by the State Society, be adopted, and the Secretary be instructed to communicate with adjoining County Secretaries. Motion prevailed.

The following officers were then elected for the ensuing year: President, Dr. A. C. Tompsett, Hesperia; Vice President, Dr. N. DeHaas, Fremont; Secretary, W. H. Barnum, Fremont; Committee on Medical Defense, Dr. N. DeHaas, Fremont; Delegate to M.S.M.S., Dr. J. C. Branch, White Cloud; Alternate to M.S.M.S., Dr. C. A. Mateor, Fremont.

H. Barnum, Secretary.

GRATIOT-ISABELLA-CLARE COUNTY

The Gratiot-Isabella-Clare County Medical Society had as its guests Dr. R. Earle Smith of Grand Rapids, and Harvey George Smith, Executive Secretary of the Michigan State Medical Society.

Mr. Smith gave an interesting talk to the members present about the work of the State Society and about its relations to the public.

Dr. Earle Smith showed about 150 slides of the common skin diseases and explained each disease as he went along. The pictures were splendid and the doctor made the subject of skin diseases very interesting. Like any other illustrated lecture, it simply has to be seen and heard to be appreciated.

E. M. Highfield, Secretary.

Among the Books

A Review and Frank Appraisal of Medical Books That are Proffered to the Profession by Publishers.

DISEASES OF THE NEW BORN: John A. Foot, M.D. J. B. Lippincott Co., Philadelphia.

This monograph concisely discusses its subject in acceptable form and imparts that knowledge that is so essential in the treatment of the new born infancy. It is timely presentation and one that should awaken doctors to the fact that if they are alert to these diseases they may materially reduce mortality. The text is clear, illustrations good with diagnosis and treatment concisely set forth.

MODERN METHODS OF AMPUTATIONS: Thomas G. Orr, A. B., M. D. Price \$3.50. C. V. Mosley Co., St. Louis, Mo.

The outlining of practical methods of amputations is well set forth. It is a guide that will aid every man who attempts to perform an amputation.

A MANUAL OF HYGEINE AND SANITATION: Seneca Egbert, A. M., M. D., Dr. P. H. Eighth Edition. Price \$4.00. Lea & Febiger, Philadelphia.

Here is one of the few really excellent manuals on an important subject. It is void of fads or fancies. It is practical and based on substantial facts and experiences. Every health official, every teacher, yes and every doctor should be familiar with its contents and conform to its teachings.

HANDBOOK OF DISEASES OF THE RECTUM: L. J. Hirschman, M. D., Detroit. 430 pp.; 250 illustrations. Price \$6.50. C. V. Mosby Company, St. Louis, Mo.

This is the fourth revised edition of a text that is of inestimable value. The author is so very favorably known to our Michigan profession that further comment is not required. Suffice it then when we state that the author has imparted clearly and fully essential factors as well as diagnosis and treatment that will aid the reader to better attend those who consult him upon these conditions. It is a text that will even be a source of help. It is modern and abreast of all that is known on the subject.

YOUNG'S PRACTICE OF UROLOGY: Hugh H. Young, M. D., and David M. Davis, M. D., Johns Hopkins University. With the collaboration of Franklin P. Johnson. Two octavo volumes totalling 1484 pages with 1003 illustrations, 20 being color plates, by William P. Didusch. Per set: Cloth, \$25.00 net. W. B. Saunders Company, Philadelphia and London.

This master text is based upon the study of 12,500 cases coming under the author's care. The senior author's name at once commands attention for he who

has remained abreast of medical progress is aware of his valued contributions to urological literature. To fully comment upon this text would require abstracting from each chapter. The reader must therefore accept our general comments which, summarized, are: The most complete text existant on urology; illustrated fully and pointedly, complete in etiology, and pathology; basic symptoms and diagnosis clearly set forth with treatment fully imparted. It is a text that supercedes all others.

SIXTY YEARS IN MEDICAL HARNESS: Charles Ben-eulyn Johnson, M. D. Introduction by Victor Robinson, M. D. \$3.00 postpaid. Volume I of The Library of Medical History. Published by Medical Life Press, 12 Mt. Morris Park, West, New York, N.Y.

Received.

THE SURGICAL CLINICS OF NORTH AMERICA: (Issued serially, one number every other month). Volume VI, Number 1 (Philadelphia Number—February, 1926). 325 pages with 136 illustrations. Per clinic year (February, 1926 to December, 1926). Paper, \$12.00; Cloth, \$16.00 net. W. B. Saunders Company, Philadelphia and London.

Of continued interest and value, containing much that is helpful.

ADVANTAGES OF DRIED MILK IN INFANT FEEDING

In recent years dried milks have achieved great popularity among physicians in cases where an adequate supply of breast milk is unavailable, and in cases where there is inability on the part of the infant to tolerate ordinary cow's milk or, where a good, clean, wholesome supply of cow's milk is not procurable.

The reason for this popularity is quite obvious, as dried milks have many advantages which recommend them to the busy practitioner. They are practically sterile, have excellent keeping qualities, their nutritive properties are unimpaired, and they offer to the mother or nurse a safe supply of dependable cow's milk which is easily and quickly prepared for infant feeding.

Lactogen, a dried milk put out by the Nestle's Food Company of New York, is one of the recent additions to the many dried milks now on the market, and is meeting with great favor from physicians, owing to its close approximation to human milk in component parts and ease of digestion.

In the process of its manufacture the integrity of the vitamins is retained and by a special hemogenizing process the butter fat globules are reduced to approximate the butter fat globules in human milk.

Lactogen is particularly useful as a complementary food for the nursing infant, as it permits concentrated feedings with an increased food intake, without requiring large amounts of fluid. When given for this purpose, especially in infants whose stools have a tendency to be loose or frequent, Lactogen tends to reduce the number of stools and improve their quality.

One of the outstanding advantages of Lactogen is the fact that it is marketed only upon the recommendation or prescription of physicians; there are no feeding instructions upon the trade package.

To physicians desiring samples and literature regarding Lactogen and its uses, the Nestle's Food Company, 130 William Street, New York, will be pleased to mail same upon request.

LYMPHOBLASTOMA (MALIGNANT LYMPHOMA)

Four hundred and seventy-seven cases of lymphoblastoma are analyzed by George R. Minot and Raphael Isaacs, Boston (Journal A.M.A., April 17 and 24, 1926), as related to age, sex and duration, and the effect of roentgen-ray and radium irradiation and surgery. The diagnosis of some form of lymphoblastoma was established by the pathologic examination of tissue in 85 per cent of all the 477 cases. The clinical aspects of the other 15 per cent were so typical of lymphoblastoma that the cases have been included in the group. Of the 477 patients, 401 are known to be dead, and 76 are living. Lymphoblastoma occurs with greater frequency in males than in females. The highest incidence of lymphoblastoma is in patients aged 20 to 24, with a secondary rise in frequency in those from 35 to 39. The disease appears to be relatively rare in males at the time of puberty (10 to 14 years of age), while the frequency of lymphoblastoma in females of this age and at the ages of 45 to 54, or the time of the menopause, is to be noted. The statistical facts recorded concerning the age incidence of patients with lymphoblastoma serve to emphasize what Bunting and others have noticed, that age and sex importantly influence the susceptibility of the lymphoid tissue to disease. These factors play a role not only in age incidence and occurrence of type of lymphoblastoma, but also in the rate of progress of the disease state. Suitable irradiation with roentgen rays or radium is a distinctly beneficial form of treatment for patients with lymphoblastoma, bringing relief to many sufferers. There were 163 patients of the 401 known to be dead that were not treated with any form of irradiation; 33 of these underwent a surgical operation with removal of a considerable amount of diseased tissue. The ages and the sexes of this group and the character of their disease states seems to be essentially the same as for 238 patients now dead who received treatment with either or both roentgen rays or radon. A surgical operation of a therapeutic sort was performed on 34 of the irradiated patients. In spite of the fact that the average duration for all cases is 2.76 years, there were 41 patients (10.2 per cent) that had lymphoblastoma for six years or more before death; 28 (11 per cent) of those irradiated, and 13 (8 per cent) of those not so treated. Seven (1.74 per cent), four irradiated and three that were not, lived more than 10 years after the initial symptoms. A comparison of the duration of the disease in the irradiated and nonirradiated patients suggests that this therapy has lengthened particularly the life of patients destined by nature to have their disease less than two and a half years, and has not influenced the course of those living long. A comparison of the data concerning the duration of the irradiated and nonirradiated diseased patients, plotted by the method of summation, shows that at any given time there was a greater percentage of patients living that were irradiated than were not. Even so, the differences at any period of duration are slight. The average duration of the disease in the 238 patients irradiated was 2.88 years, and in the 163 that were not 2.45 years. The patients treated by surgical measures, whether or not they received roentgen rays or radon, had lymphoblastoma on the average 3.67 years, or 1.11 years longer than the average duration (2.56 years) of the disease in the 334 not undergoing a therapeutic operation. The chances of the former living beyond three years from the time of their first symptoms was greater than for the whole group of irradiated patients.